#4

Original Documents, Pictures, Drawings and Screen Captures

Scanned by a G3 Facsimile Machine or Optical Scanner or Screen Capture Methods (B)

Connected to The Inventions Adjunct Device or PC Card: (C)
For a Fax Machine and via Fax Modem and Circuitry that Generates Central Office Dial Tone or by Standard Auxillary Port Means-to Include USB or by Wireless Means-to include Infrared

Connected to A Packet Switched Network via Data Modem: to include Cable, Cellular and Satellite -Resident or Remote; and Standard RJ 11 Phone Line Connector or RJ 45 LAN Connector or Cable Connector or CDMA/TDMA Cellular Connection or Satellite Up Link/ Down Link Connection (D)

Receive Images Generated by the Fax Machine or Optical Scanner or Screen Capture Method (E)

Store Images in Memory Buffer(s) (F)

Invoke Hardware and Software process to Remove Inferior CODEC's or OCR scan codes Restoring images to Native Scanned Image State (G)

Store Native Image Data In Memory Buffer(s) (H)

Compress Native Image Data with Multi Dimensional CODEC's Resident in Eproms and ASIC. Specific CODEC's to include but are not limited to: LZW-TIFF & TIFF-FX, JPEG & JPEG, 2000, MPG, Streaming Media, Harmonic Matrix Multiplication. (I)

Store in Memory Buffer(s) (J)

Obtain Unique Electronic e-mail or IP Destination Address and public or secret encryption key for Intended Recipient from address table and key ting resident in flash memory or remotely from a data base and remote key server (K)

Associate Phone Number Dialed By The Fax Machine or Other Remote Device with the e-mail or IP destination address or if null Confirm destination address via device per (K) or PC keyboard

Store in Memory Buffer(s) (N)

If encryption is selected by user or by default, encrypt stored buffer of newly compressed Image data with encryption algorithm(s) stored in EPROM and/or resident in ASIC to include but not limited to
S-MIME, S_HTTP, SXML, SET, Rijndael, PGP, DES Vernam ciphers and RSA. Additionally the multi dimesional codecs of the harmonic matrix muliplication compression schemes available in this invention can be adapted to perform non-recoverable-disappearing key encryption. (O)

Store in Memory Buffer(s) (P)

Invoke message encapsulation protocols stored in EPROM(s), to include but not limited to IP, TCP, UDP ,SMTP, POP3, MIME & extended MIME message types, IMAP, HTML and XML and encapsulate entire previous memory buffer(s) within appropriate protocol stacks (Q)

Store in Memory Buffer(s) (R)

Obtain users device, terrestrial location coordinates and/or biometrics from the device hardware and software. Hash the information to create a reflective non original information data map. (S)

Store hashed information in Memory Buffer(s) (T)

Generate message headers in accordance with selected protocols and may include non-standard x headers to identify specific transport, identity and receipt verification processes and other routing and sending reception requirements. (U)

Send entire now completed processed contents of the previous buffer(s) to intended recipient utilizing appropriate protocols over any terrestrial or satellite communication network. Retain entire contents of memory buffer(s) and message headers for a specified period of time Entire or partial memory buffer(s) contents may be permantly archived, on premise or remotely, utilizing standard achieving media and processes. (U)

The reception process is the direct inverse of the sending process above for a stand alone G3 facsimile machine and in the reception mode (A) above may include direct printers/plotters or any other message media rendering equipment, for example 3 dimensional mold making machines

Figure 1

T00T2T" 0n2Z78E0

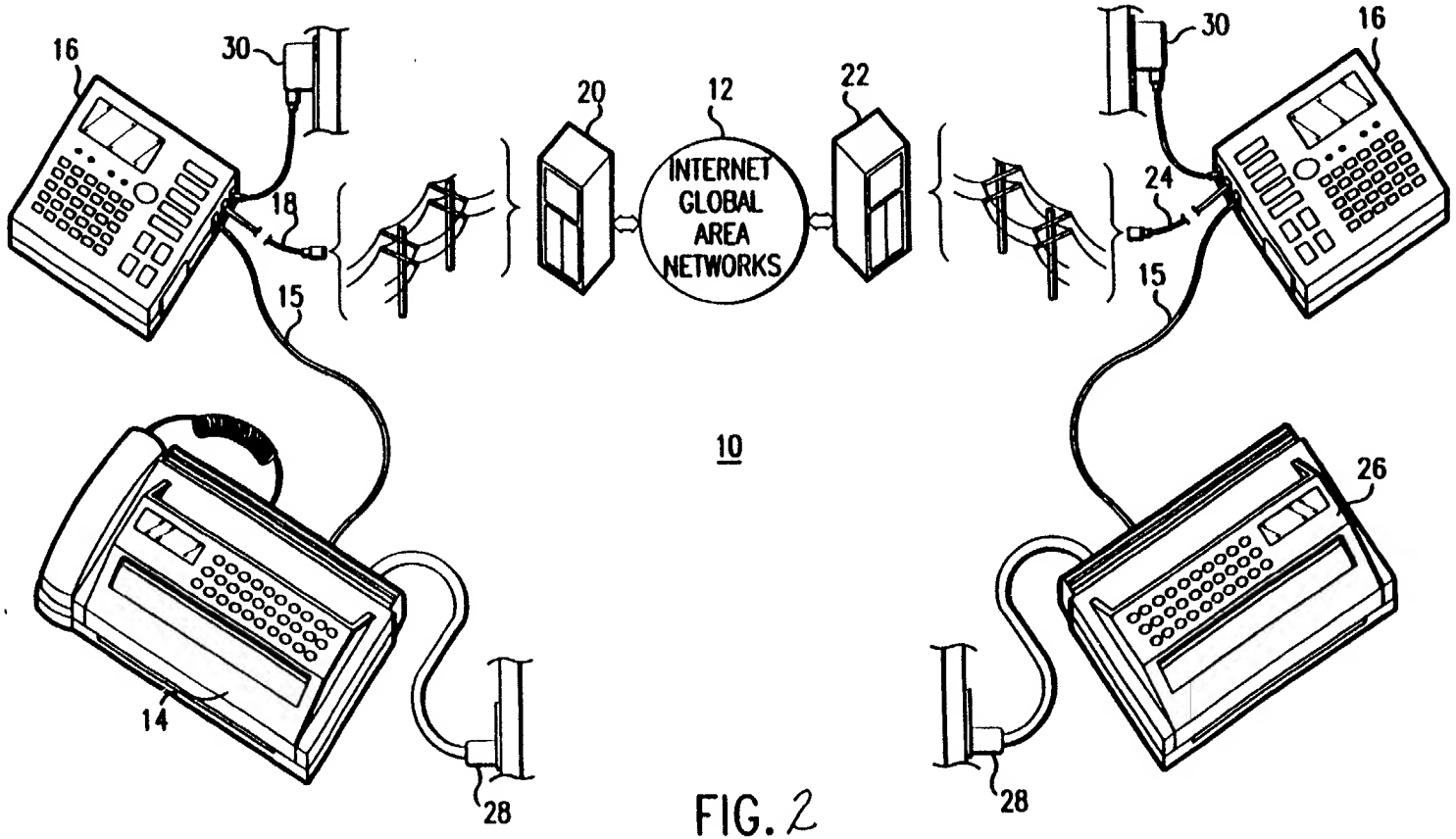


FIG. 2

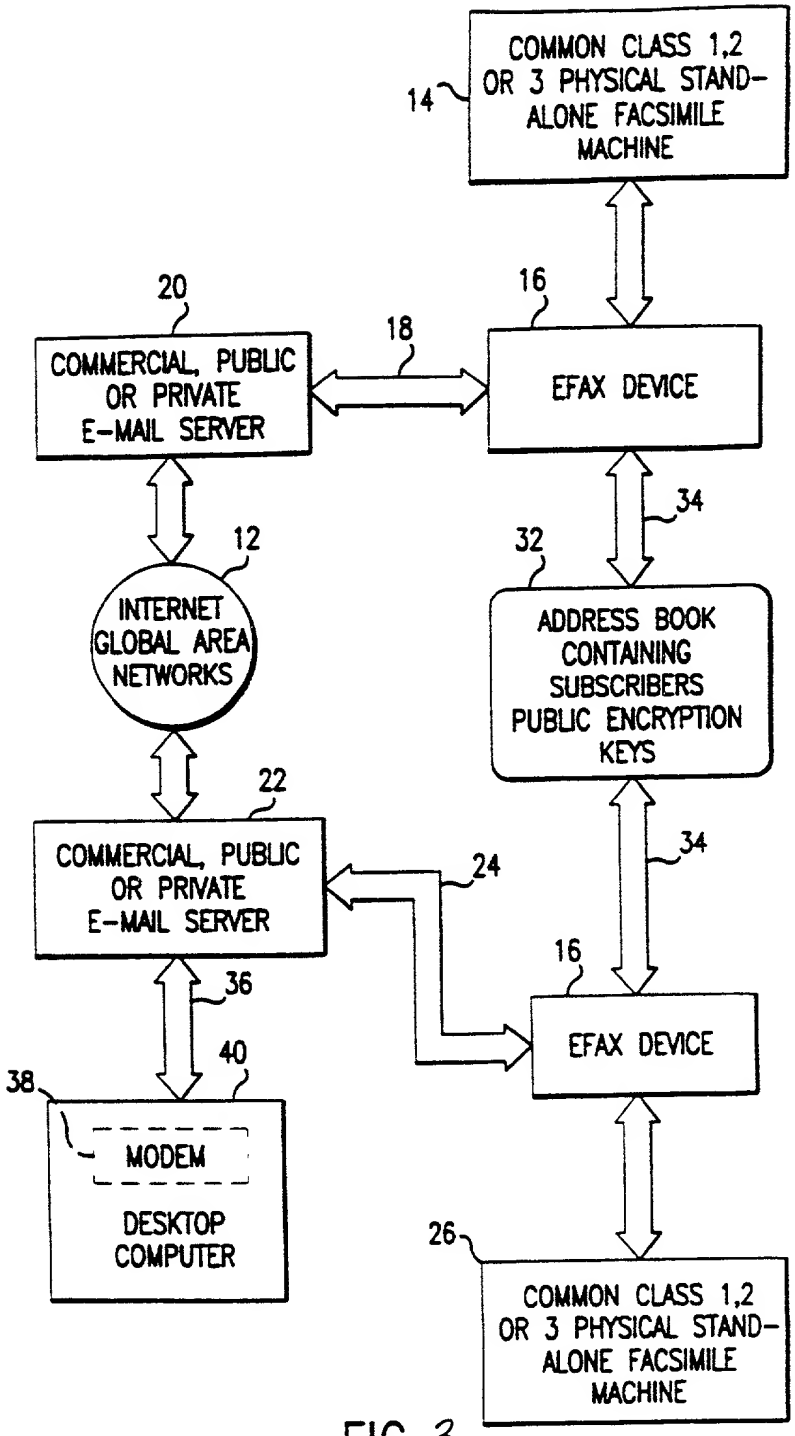

COMMON CLASS 1,2 OR 3 PHYSICAL STAND-ALONE FACSIMILE MACHINE
14
16
20
18
COMMERCIAL, PUBLIC OR PRIVATE E-MAIL SERVER
EFAX DEVICE
34
12
32
INTERNET GLOBAL AREA NETWORKS
ADDRESS BOOK CONTAINING SUBSCRIBERS PUBLIC ENCRYPTION KEYS
22
34
COMMERCIAL, PUBLIC OR PRIVATE E-MAIL SERVER
24
16
36
EFAX DEVICE
40
38
MODEM
DESKTOP COMPUTER
26
COMMON CLASS 1,2 OR 3 PHYSICAL STAND-ALONE FACSIMILE MACHINE

FIG. 3

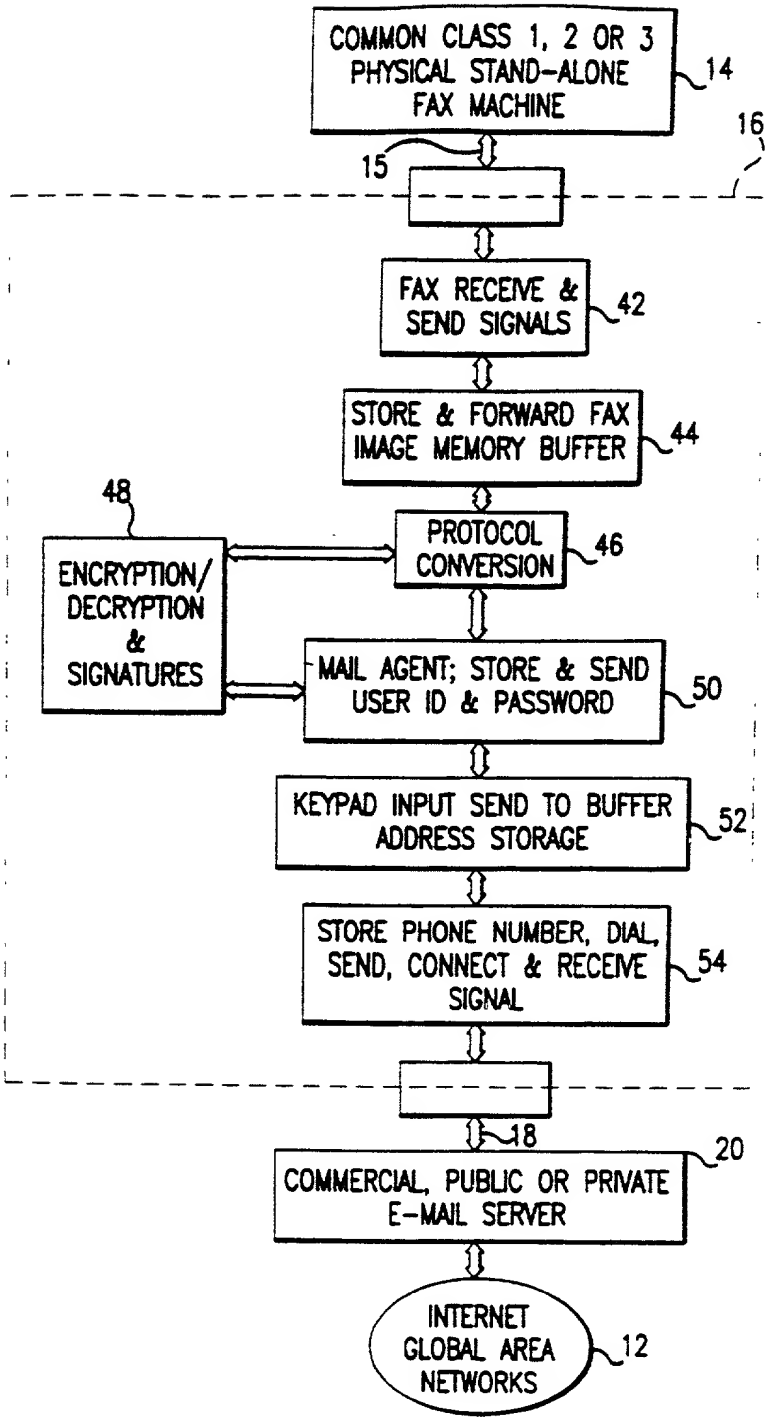

COMMON CLASS 1, 2 OR 3 PHYSICAL STAND-ALONE FAX MACHINE
14
16
15
FAX RECEIVE & SEND SIGNALS
42
STORE & FORWARD FAX IMAGE MEMORY BUFFER
44
48
ENCRYPTION/ DECRYPTION & SIGNATURES
PROTOCOL CONVERSION
46
MAIL AGENT; STORE & SEND USER ID & PASSWORD
50
KEYPAD INPUT SEND TO BUFFER ADDRESS STORAGE
52
STORE PHONE NUMBER, DIAL, SEND, CONNECT & RECEIVE SIGNAL
54
18
20
COMMERCIAL, PUBLIC OR PRIVATE E-MAIL SERVER
INTERNET GLOBAL AREA NETWORKS
12

FIG. 4

CONTACT: (949) 752-8500

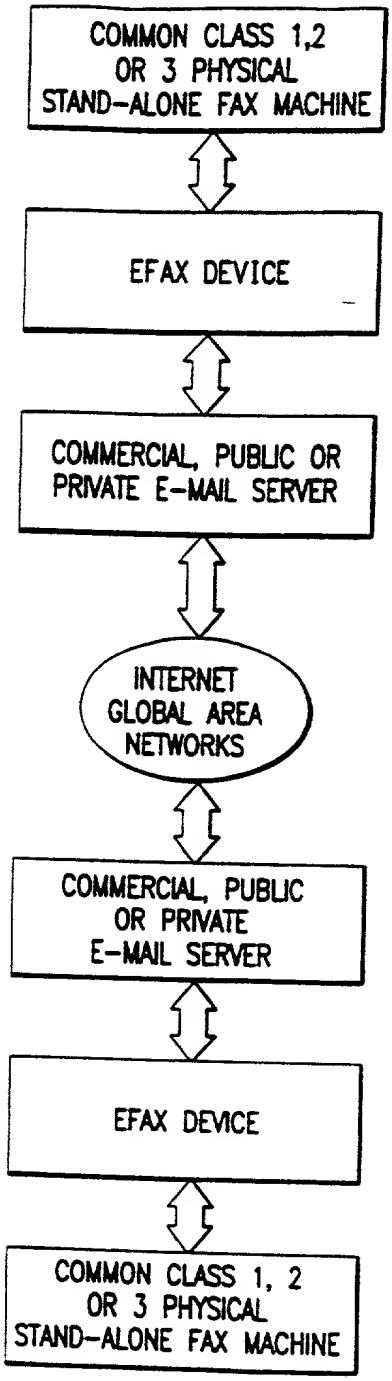


FIG. 5

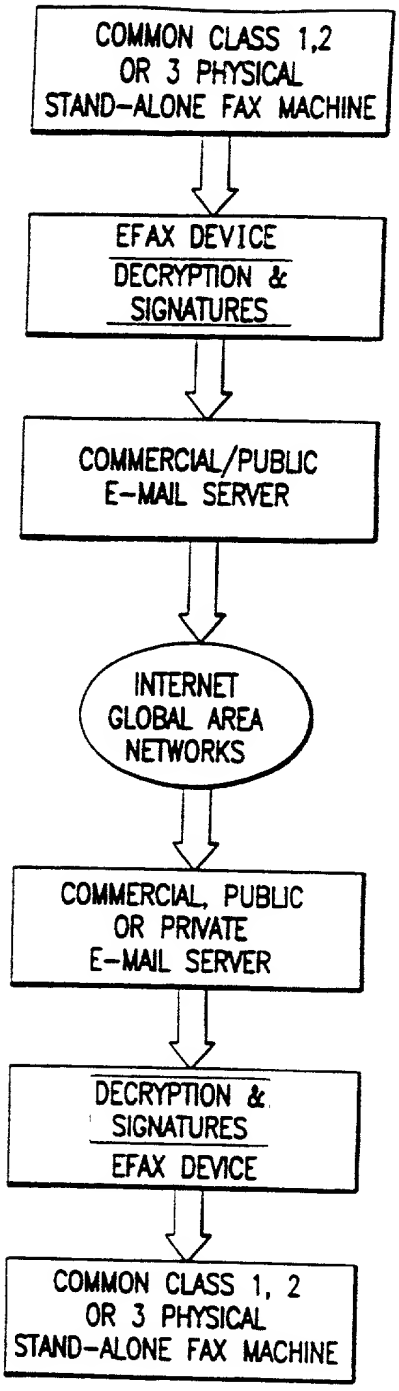


FIG. 6

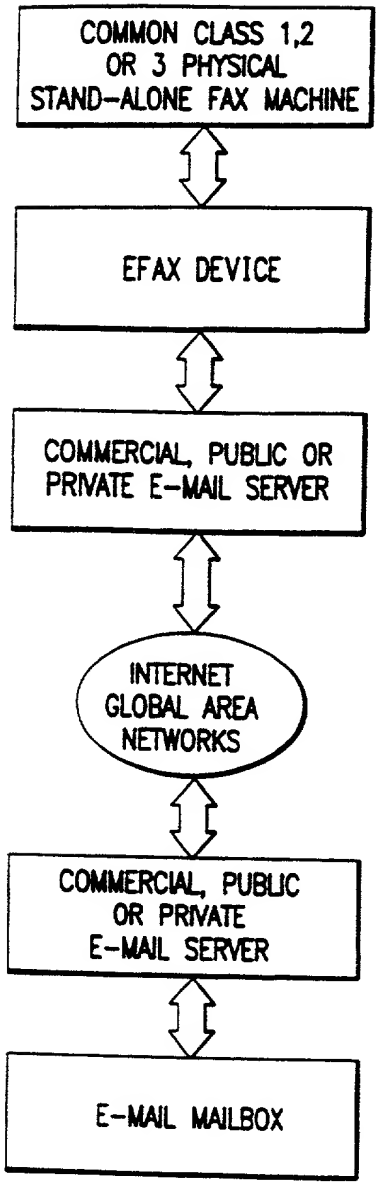

COMMON CLASS 1,2
OR 3 PHYSICAL
STAND-ALONE FAX MACHINE
EFAX DEVICE
COMMERCIAL, PUBLIC OR
PRIVATE E-MAIL SERVER
INTERNET
GLOBAL AREA
NETWORKS
COMMERCIAL, PUBLIC
OR PRIVATE
E-MAIL SERVER
E-MAIL MAILBOX

FIG. 7

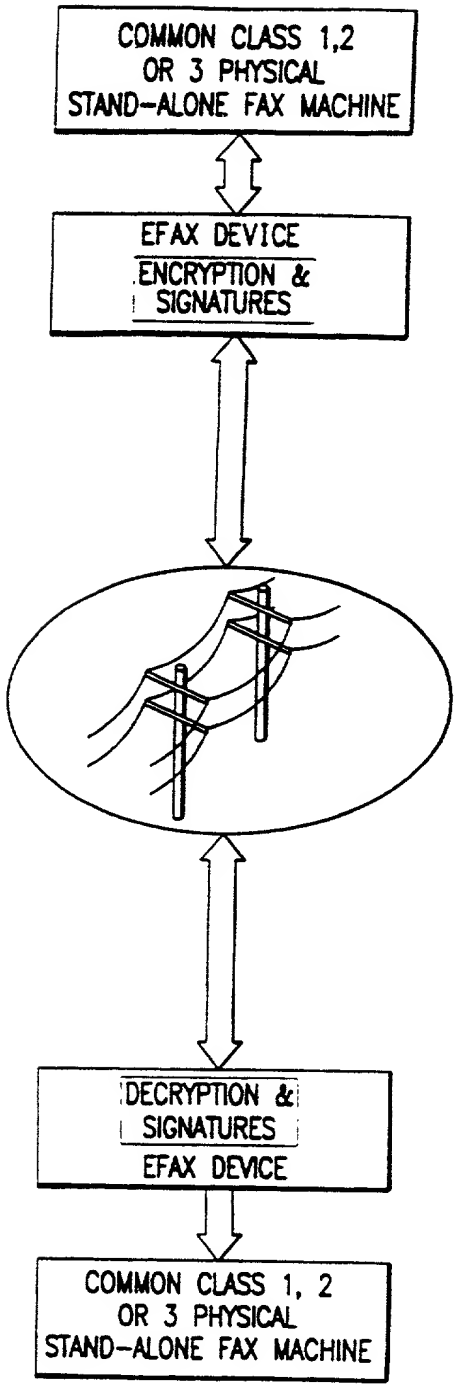

COMMON CLASS 1,2
OR 3 PHYSICAL
STAND-ALONE FAX MACHINE
EFAX DEVICE
ENCRYPTION &
SIGNATURES
DECRYPTION &
SIGNATURES
EFAX DEVICE
COMMON CLASS 1, 2
OR 3 PHYSICAL
STAND-ALONE FAX MACHINE

FIG. 8

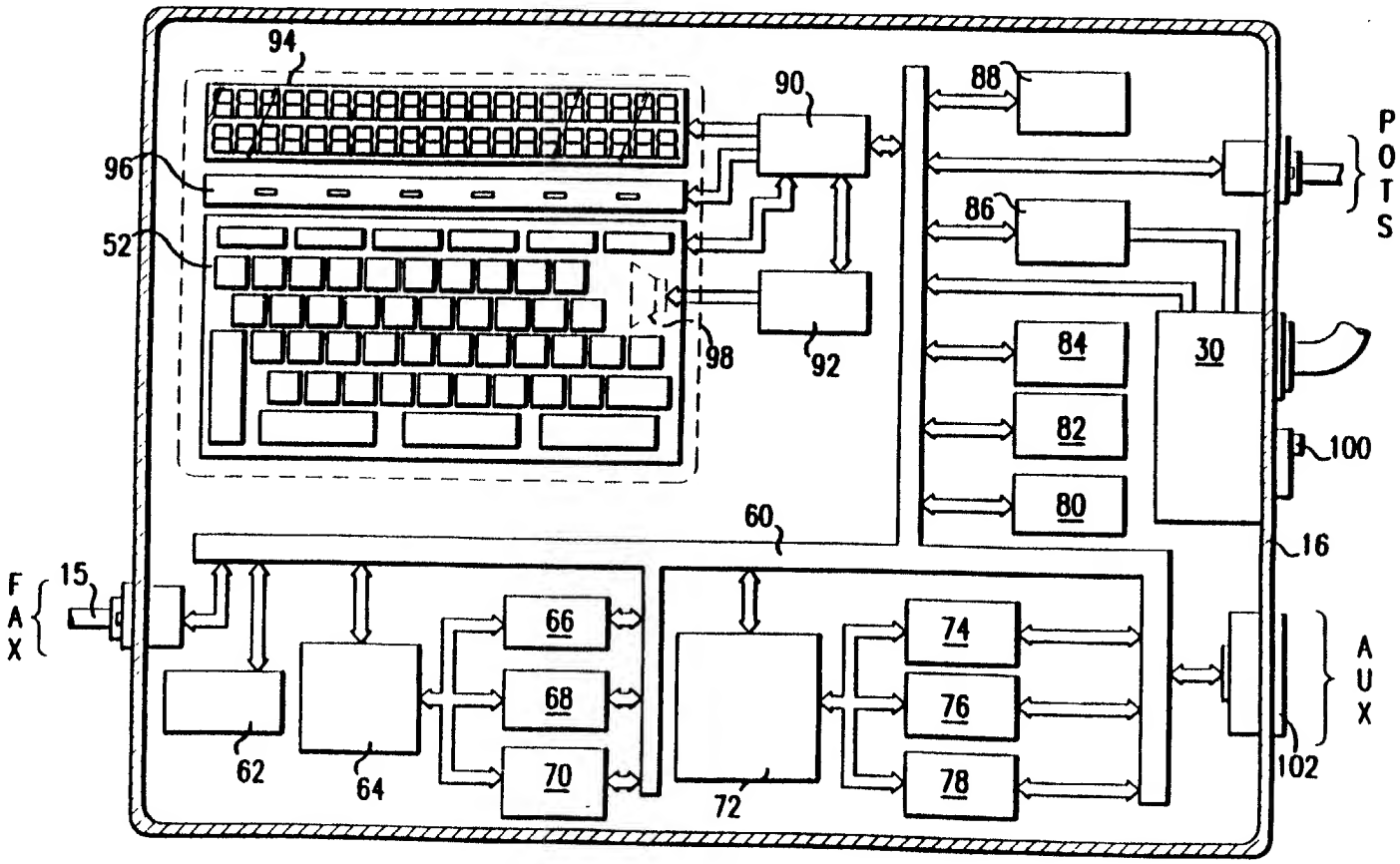

94
90
88
96
52
86
98
92
84
30
82
100
80
60
16
15
66
74
68
76
70
78
62
64
72
102
POTS
FAX
AUX

FIG. 9

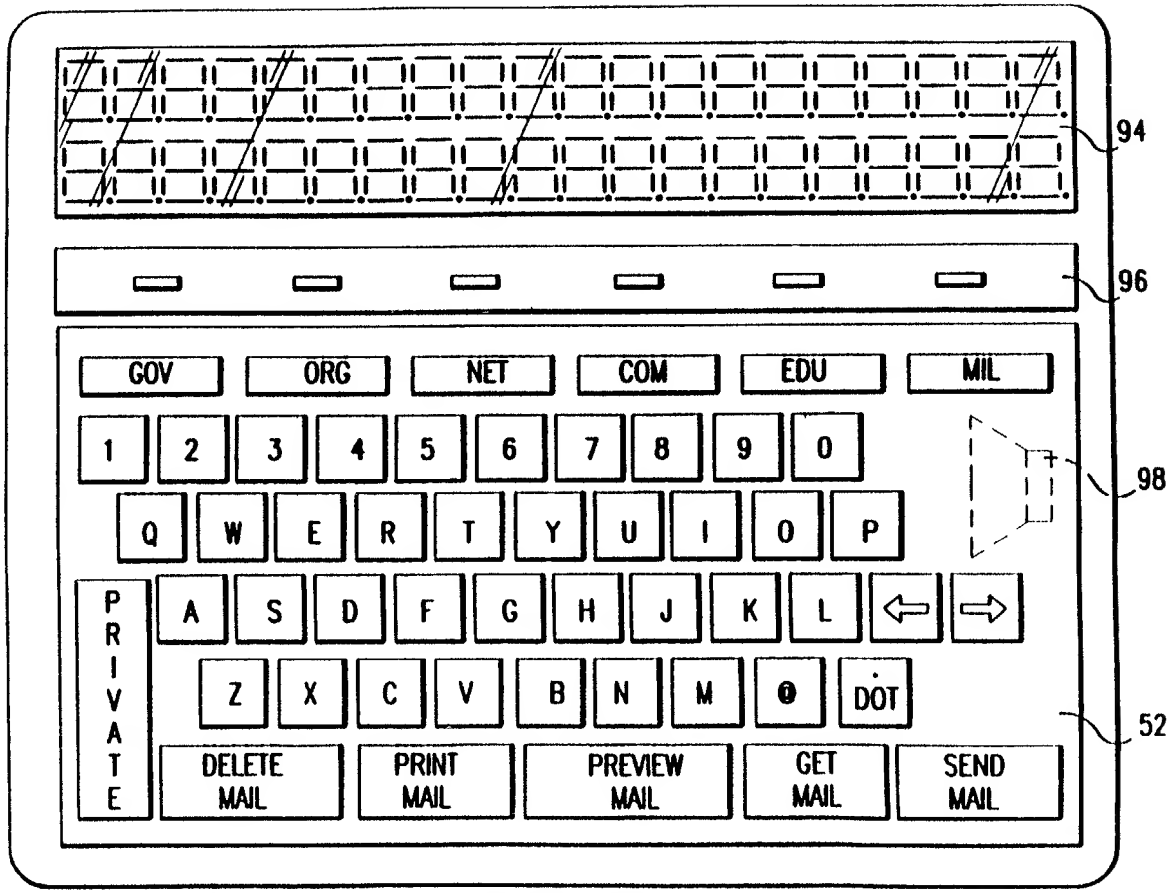

94
96
GOV
ORG
NET
COM
EDU
MIL
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M @ DOT
PRIVATE
DELETE MAIL
PRINT MAIL
PREVIEW MAIL
GET MAIL
SEND MAIL
98
52

FIG. 10

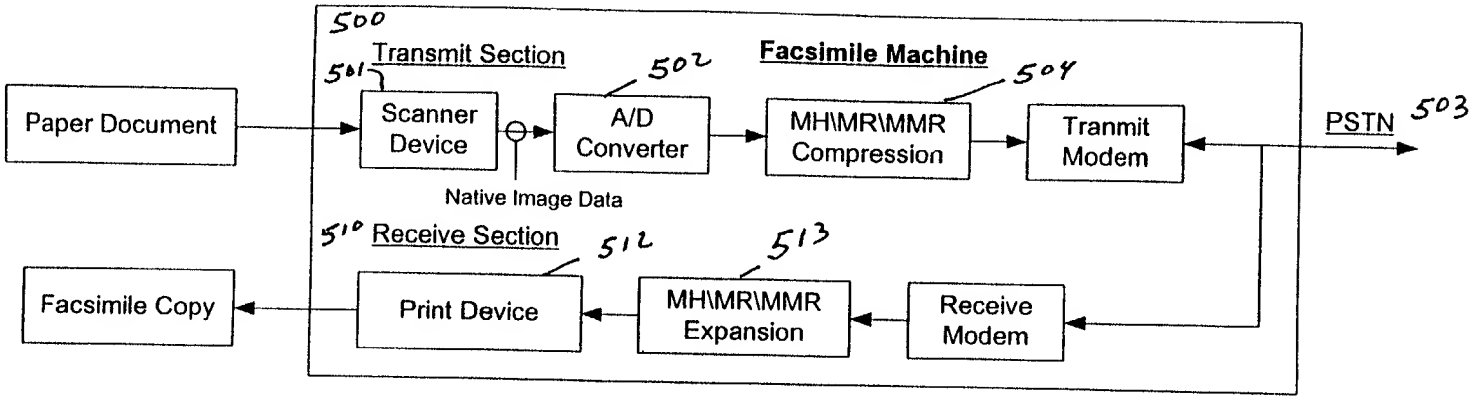
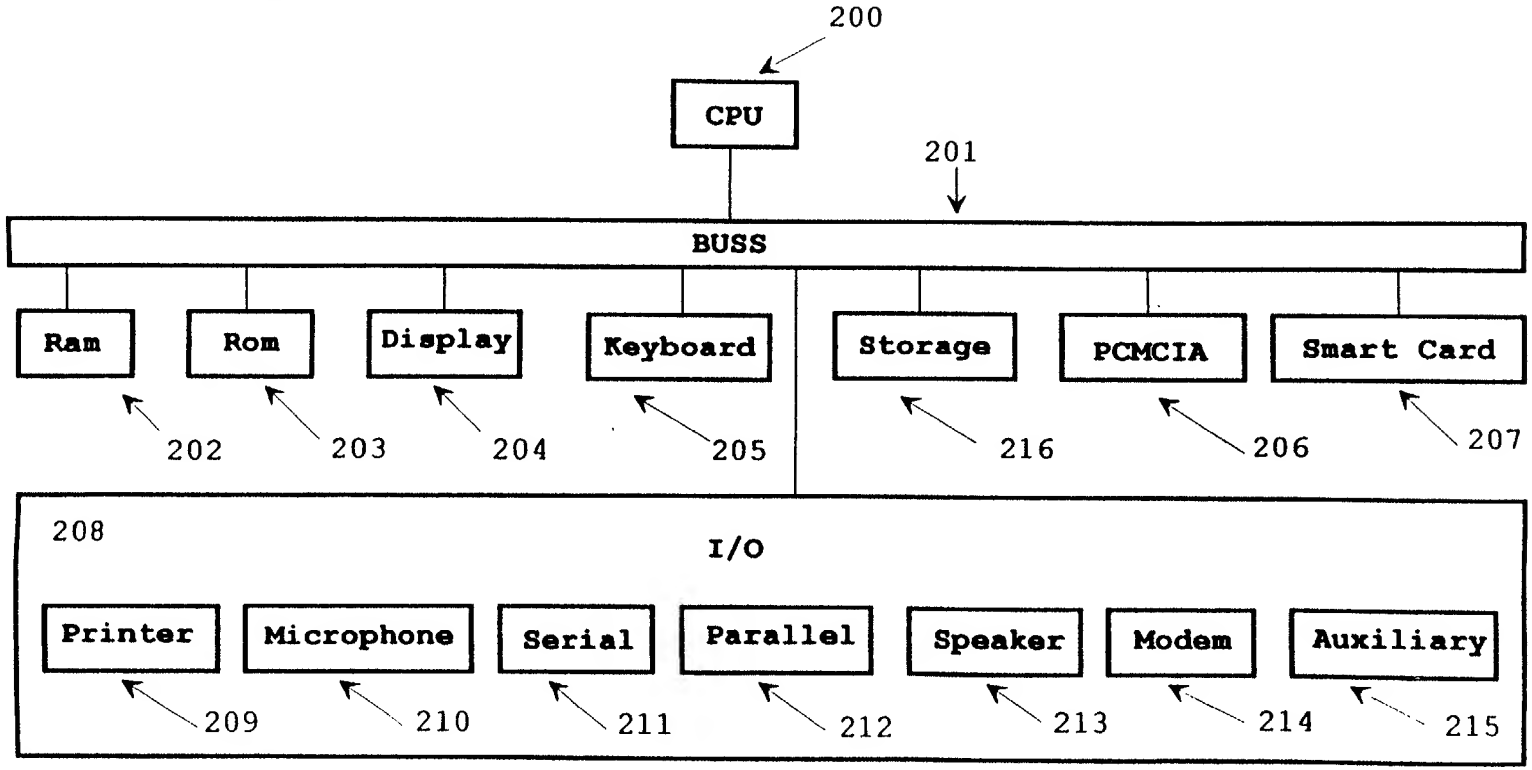

500
Facsimile Machine
Transmit Section
501
Scanner Device
502
A/D Converter
504
MH\MR\MMR Compression
Tranmit Modem
PSTN
503
Paper Document
Native Image Data
510 Receive Section
512
513
Facsimile Copy
Print Device
MH\MR\MMR Expansion
Receive Modem

Figure 11

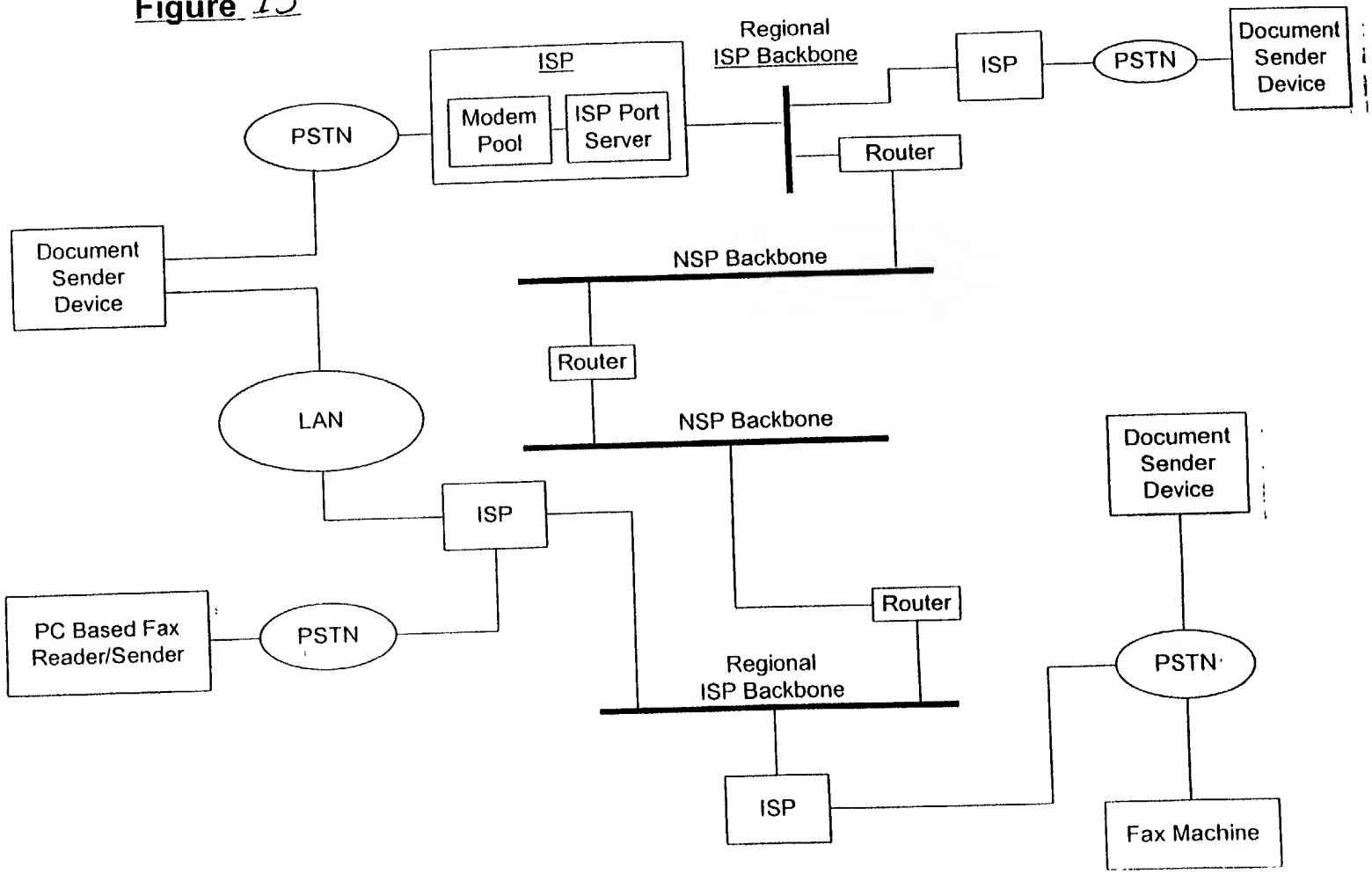
TARGET 0102478960

Figure 12



FORTET 0h2728

Figure 13



TOP SECRET//HCS//SI

Figure 14

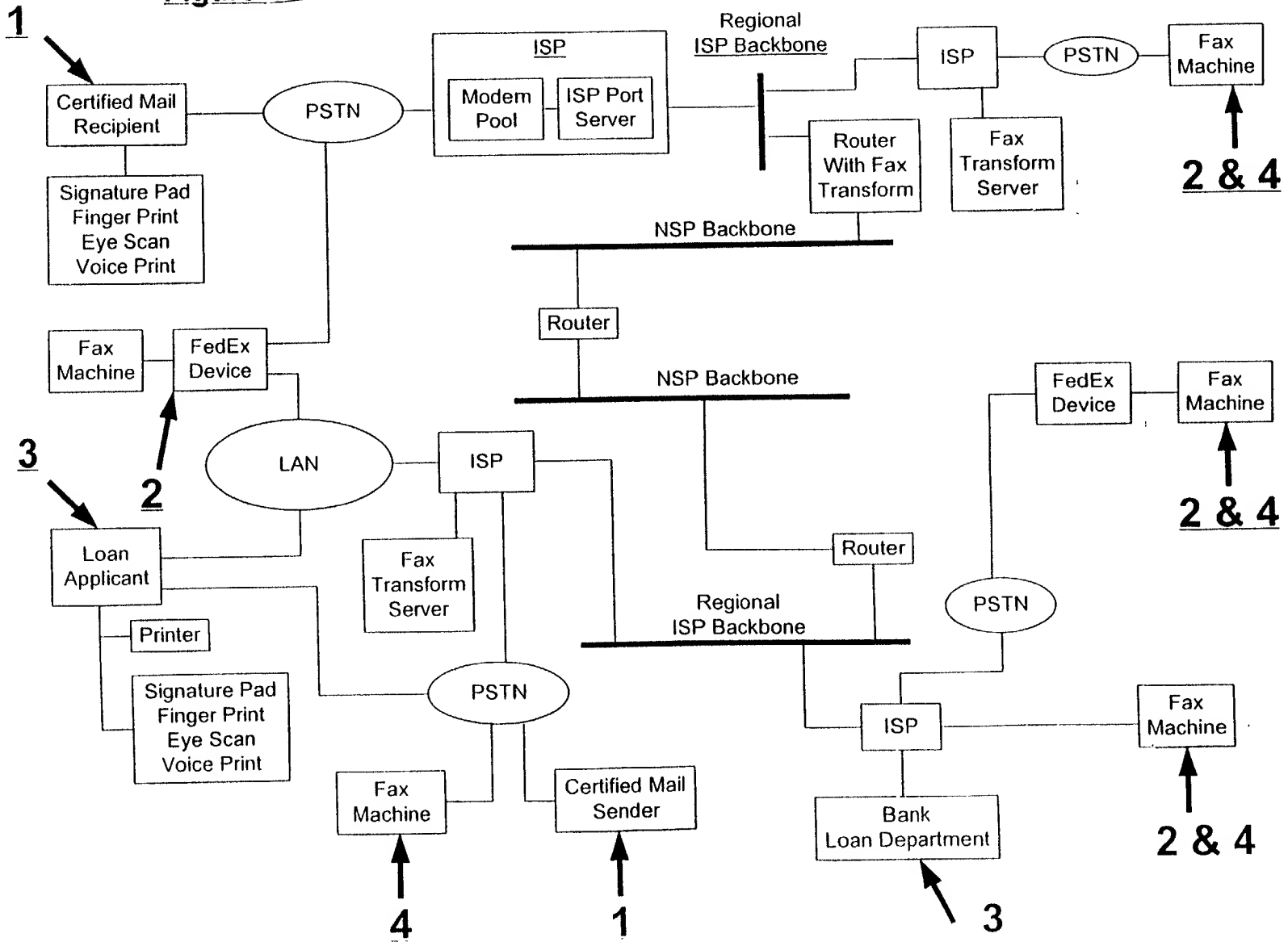


Figure 15

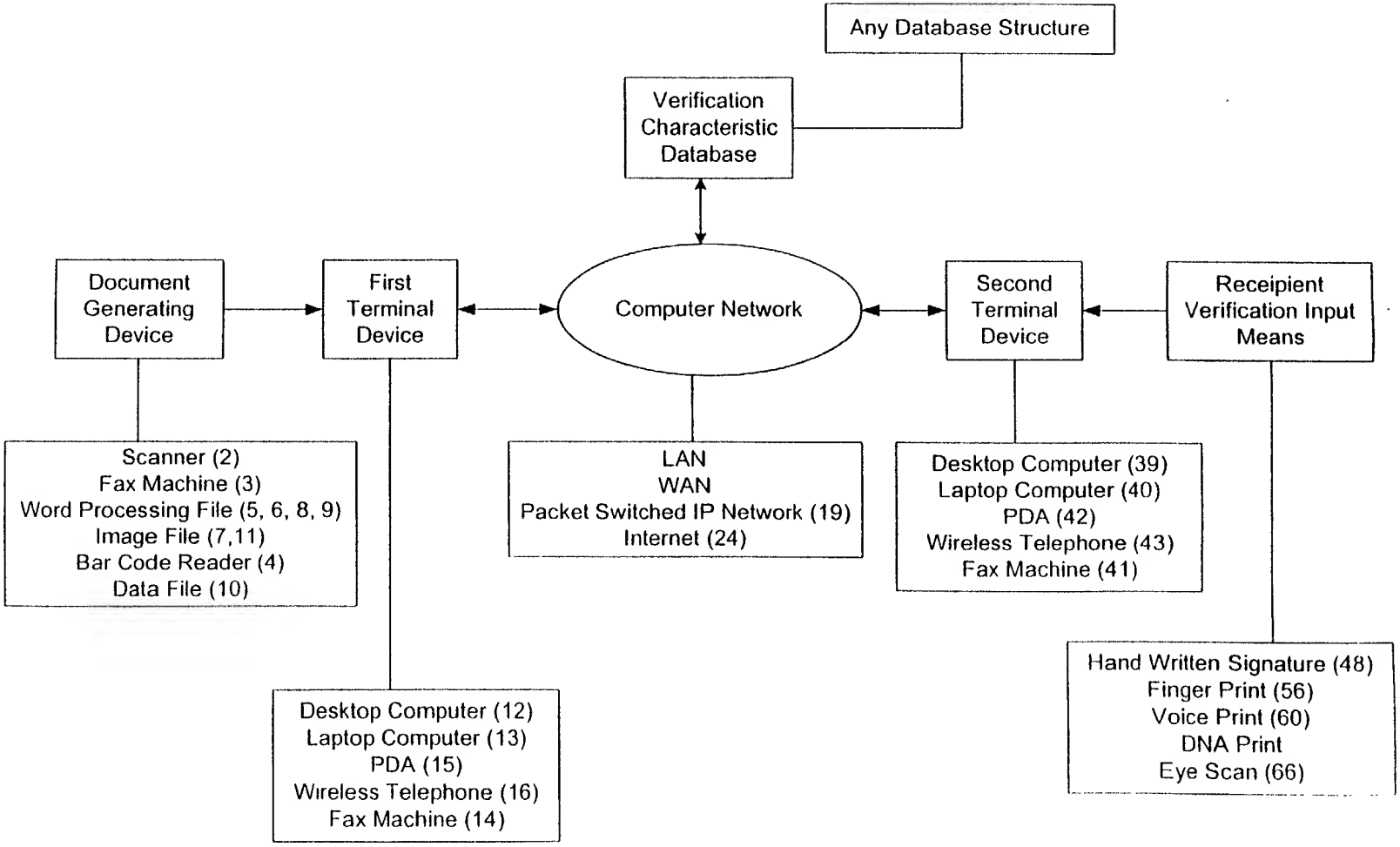
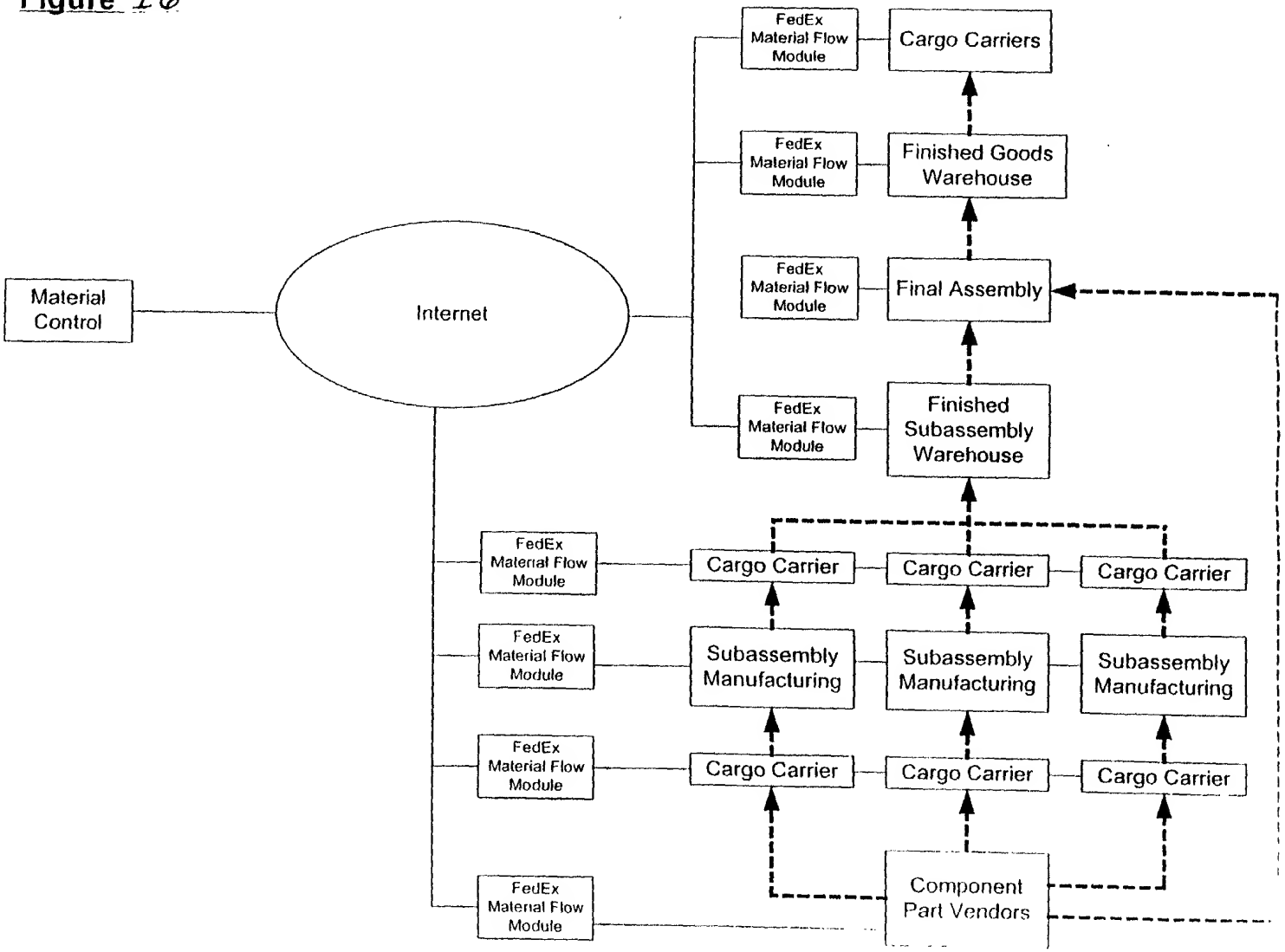

Any Database Structure
Verification Characteristic Database
Document Generating Device
First Terminal Device
Computer Network
Second Terminal Device
Receipient Verification Input Means
Scanner (2)
Fax Machine (3)
Word Processing File (5, 6, 8, 9)
Image File (7,11)
Bar Code Reader (4)
Data File (10)
LAN
WAN
Packet Switched IP Network (19)
Internet (24)
Desktop Computer (39)
Laptop Computer (40)
PDA (42)
Wireless Telephone (43)
Fax Machine (41)
Hand Written Signature (48)
Finger Print (56)
Voice Print (60)
DNA Print
Eye Scan (66)
Desktop Computer (12)
Laptop Computer (13)
PDA (15)
Wireless Telephone (16)
Fax Machine (14)

Figure 16


Material Control
Internet
FedEx Material Flow Module
Cargo Carriers
FedEx Material Flow Module
Finished Goods Warehouse
FedEx Material Flow Module
Final Assembly
FedEx Material Flow Module
Finished Subassembly Warehouse
FedEx Material Flow Module
Cargo Carrier
Cargo Carrier
Cargo Carrier
FedEx Material Flow Module
Subassembly Manufacturing
Subassembly Manufacturing
Subassembly Manufacturing
FedEx Material Flow Module
Cargo Carrier
Cargo Carrier
Cargo Carrier
FedEx Material Flow Module
Component Part Vendors

TOSTEF 0HE2C860

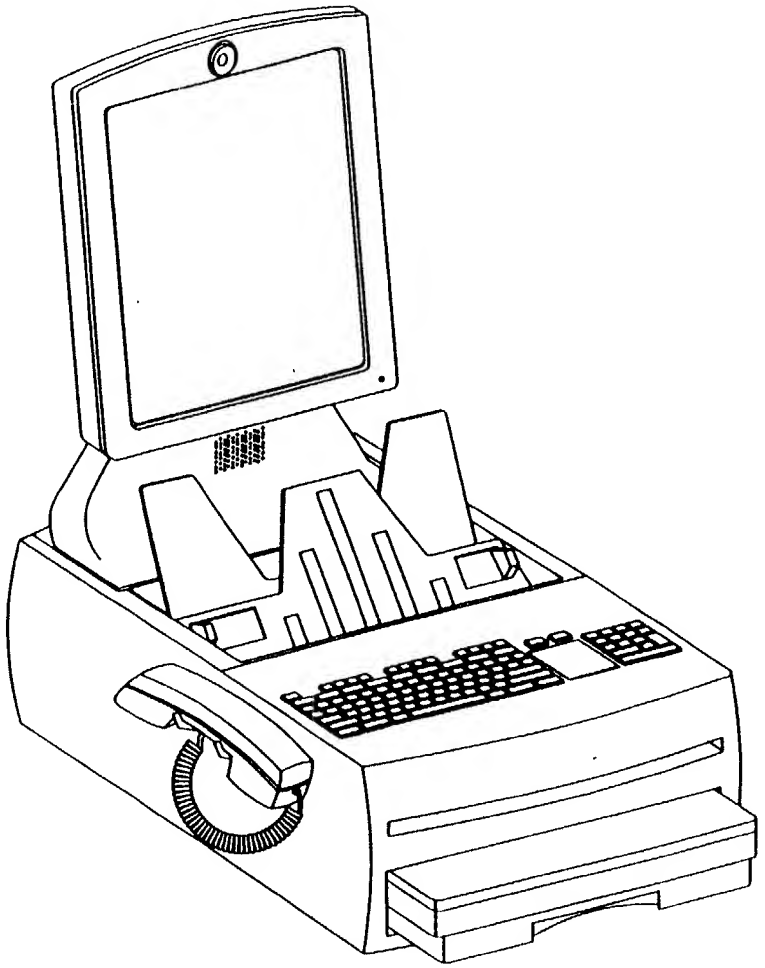


Figure 17

FORTE' 06262860

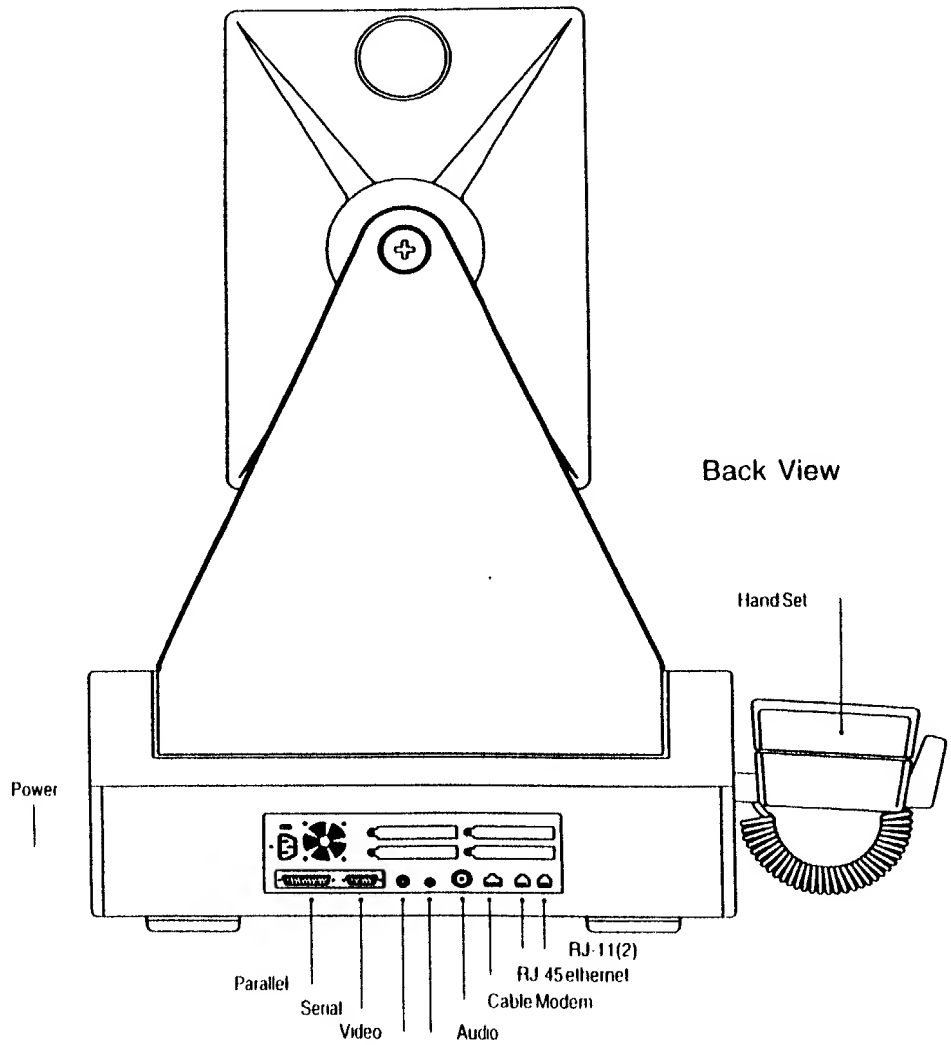


Figure 18

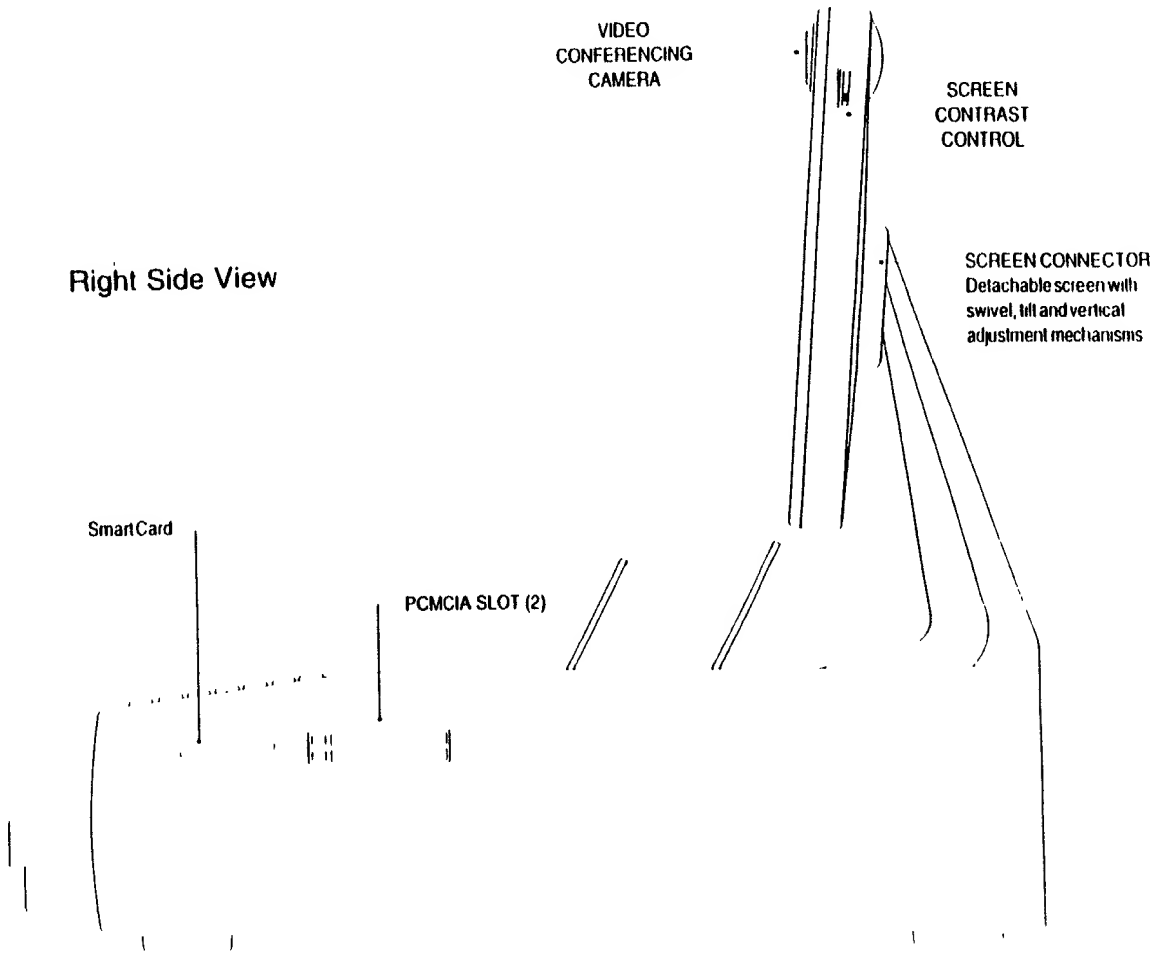

VIDEO
CONFERENCING
CAMERA
SCREEN
CONTRAST
CONTROL
SCREEN CONNECTOR
Detachable screen with
swivel, tilt and vertical
adjustment mechanisms
Right Side View
SmartCard
PCMCIA SLOT (2)

Figure 19

FOOTER "0x2C2850

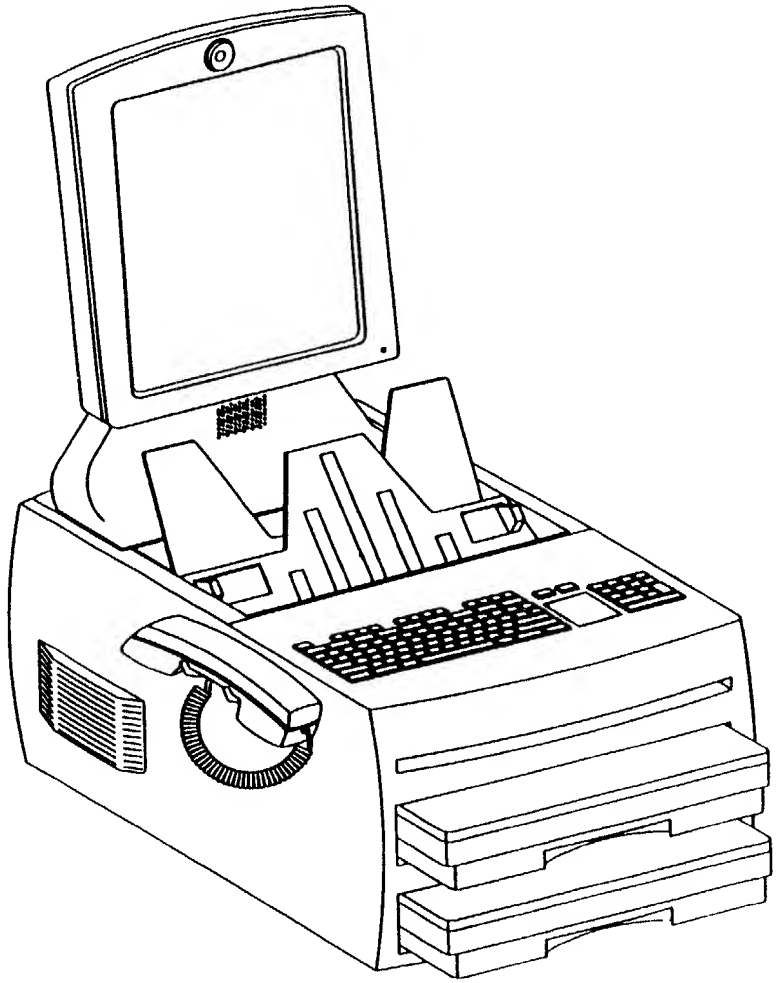


Figure 20

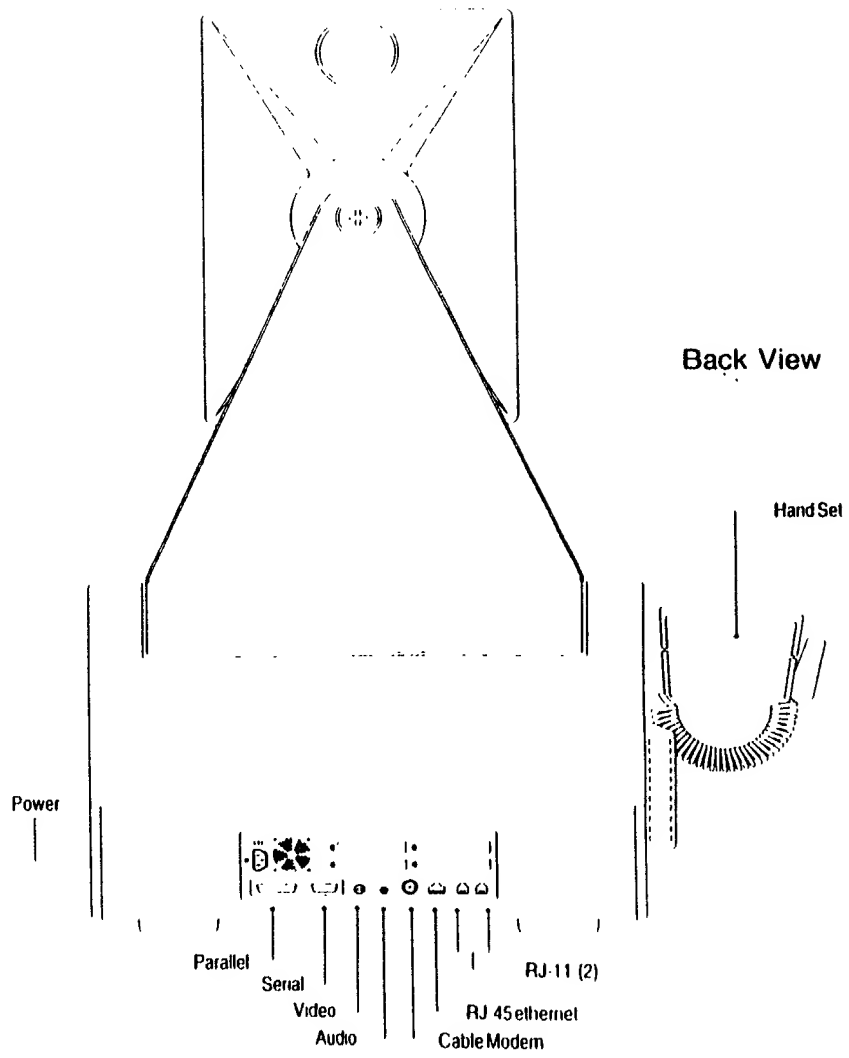

Back View
Hand Set
Power
Parallel
Serial
Video
Audio
RJ-11 (2)
RJ 45 ethernet
Cable Modem

Figure 21

FOOTET "0h2Z/3bb

e-Concierge'.MFD
Hardware Ports

Right Side View

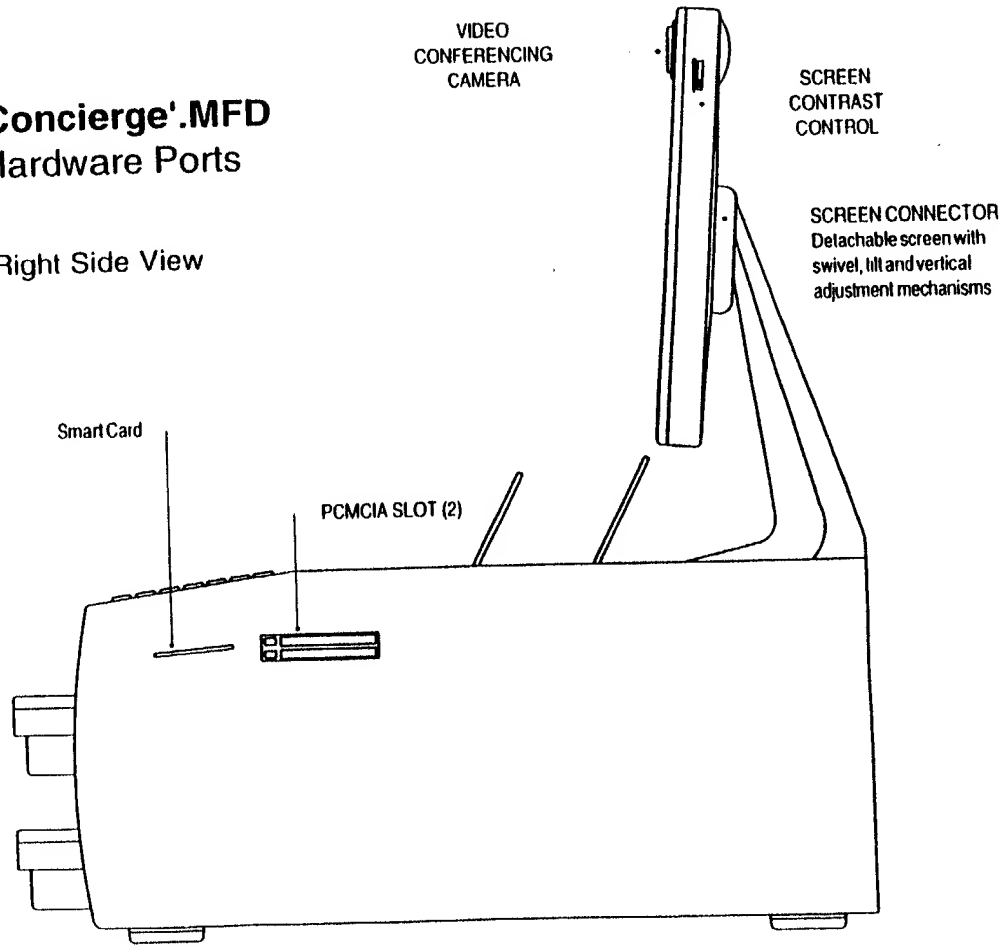


Figure 22

FOOTER" 0x2C2360

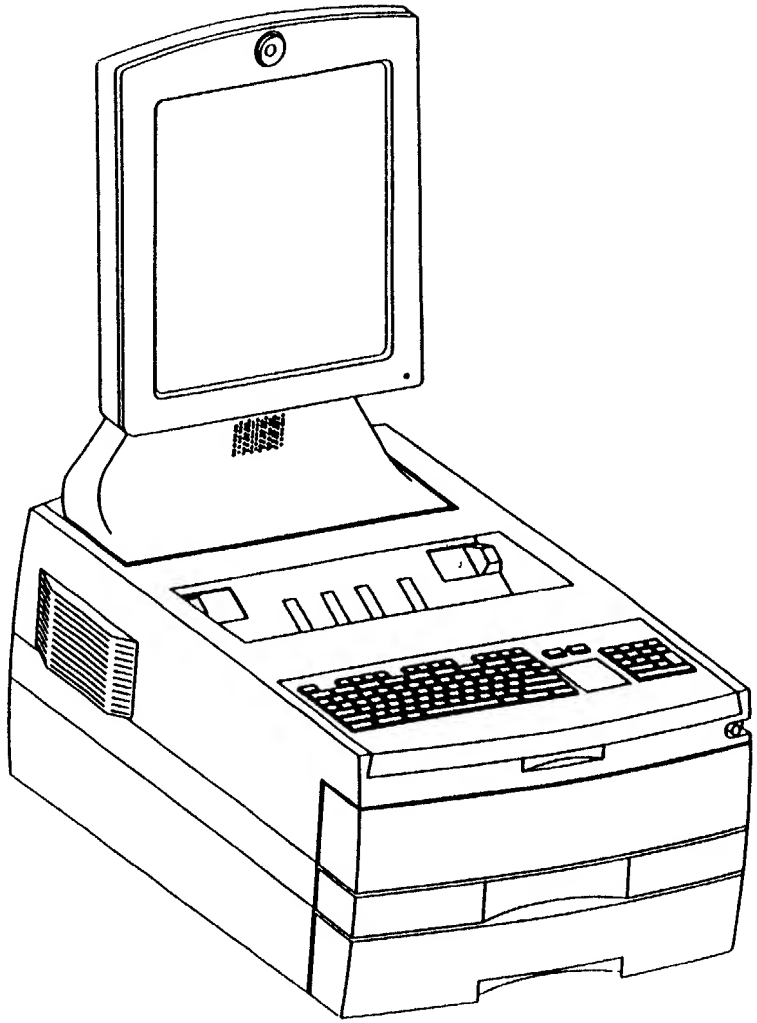
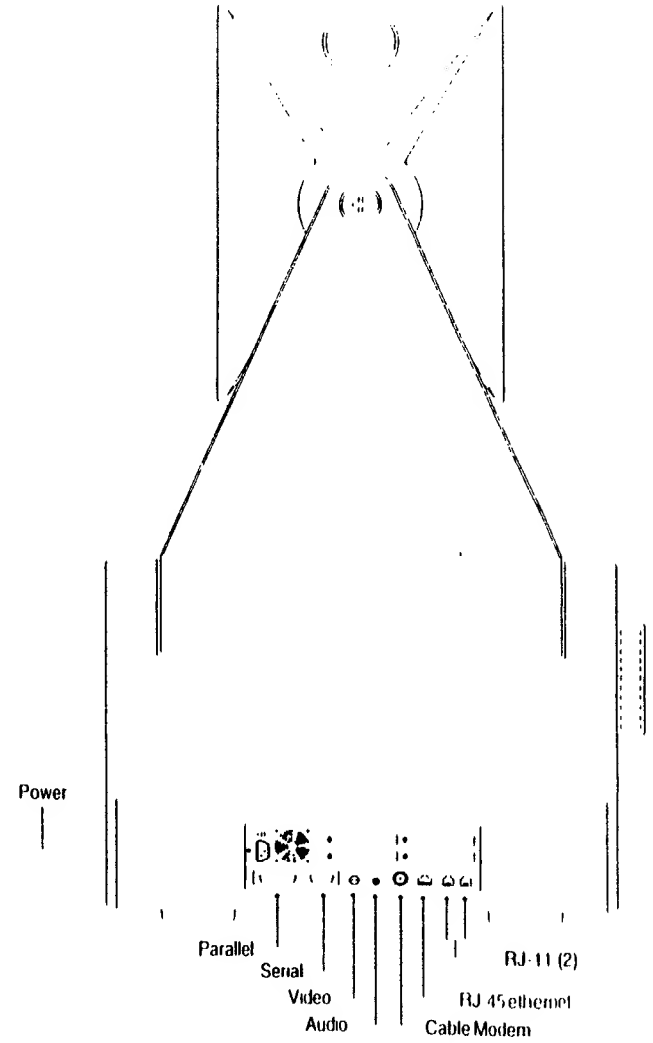


Figure 23

Docket 04-2760



Back View

Figure 24

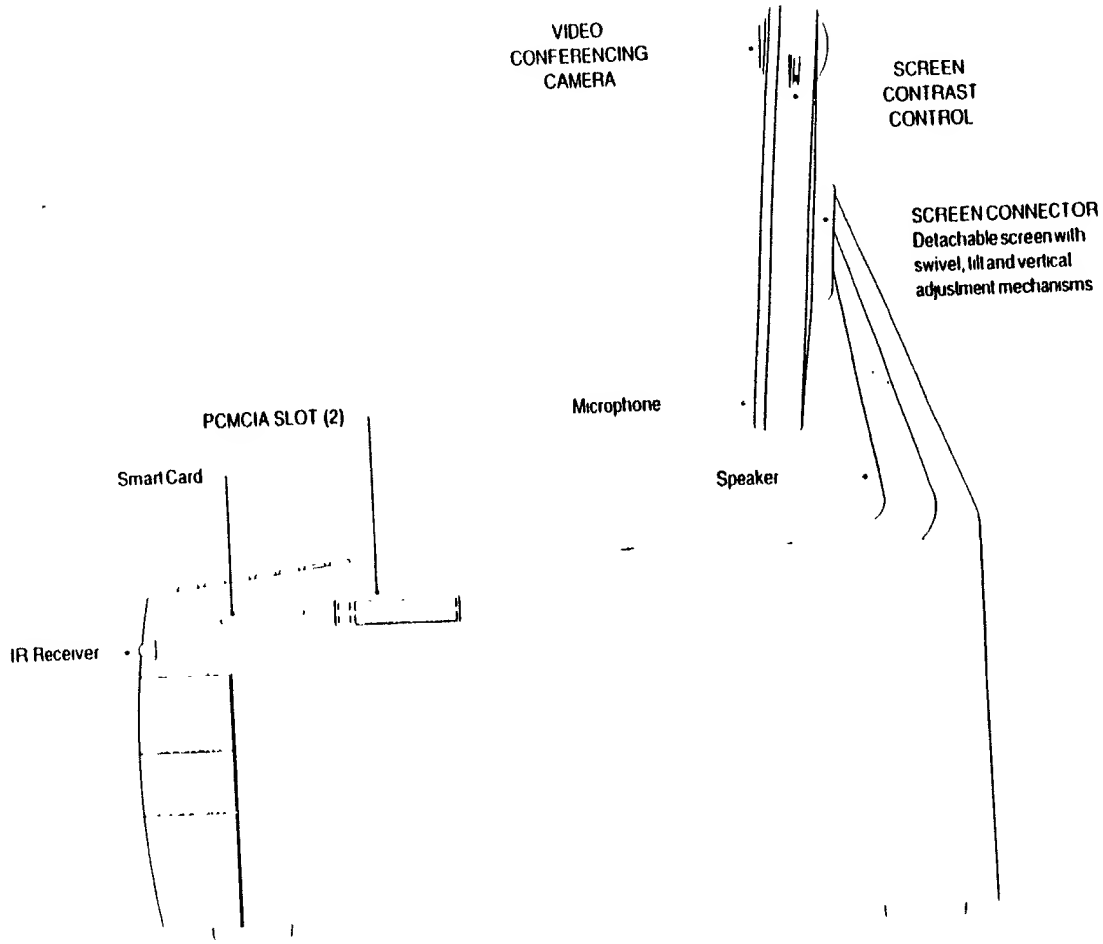

VIDEO
CONFERENCING
CAMERA
SCREEN
CONTRAST
CONTROL
SCREEN CONNECTOR
Detachable screen with
swivel, tilt and vertical
adjustment mechanisms
Microphone
Speaker
PCMCIA SLOT (2)
Smart Card
IR Receiver

Figure 25

TOSTET 0x2428E0

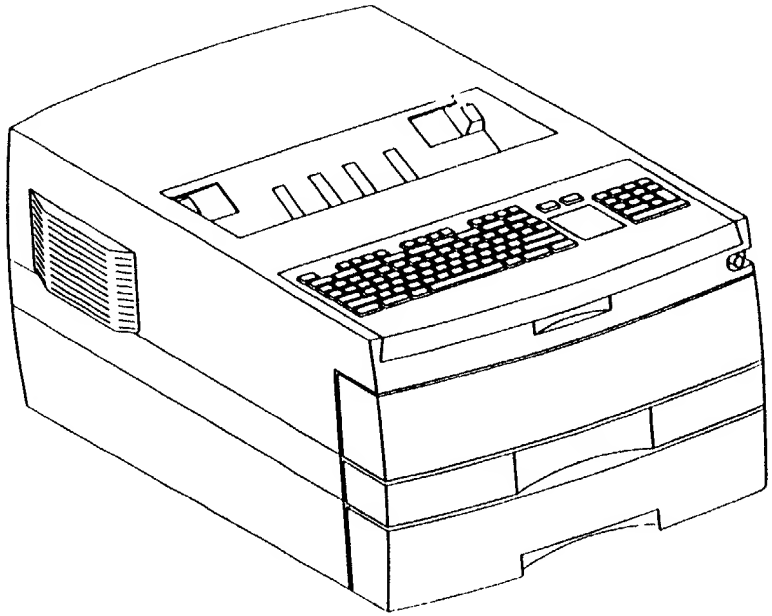


Figure 26

T80737 0H2Z6860

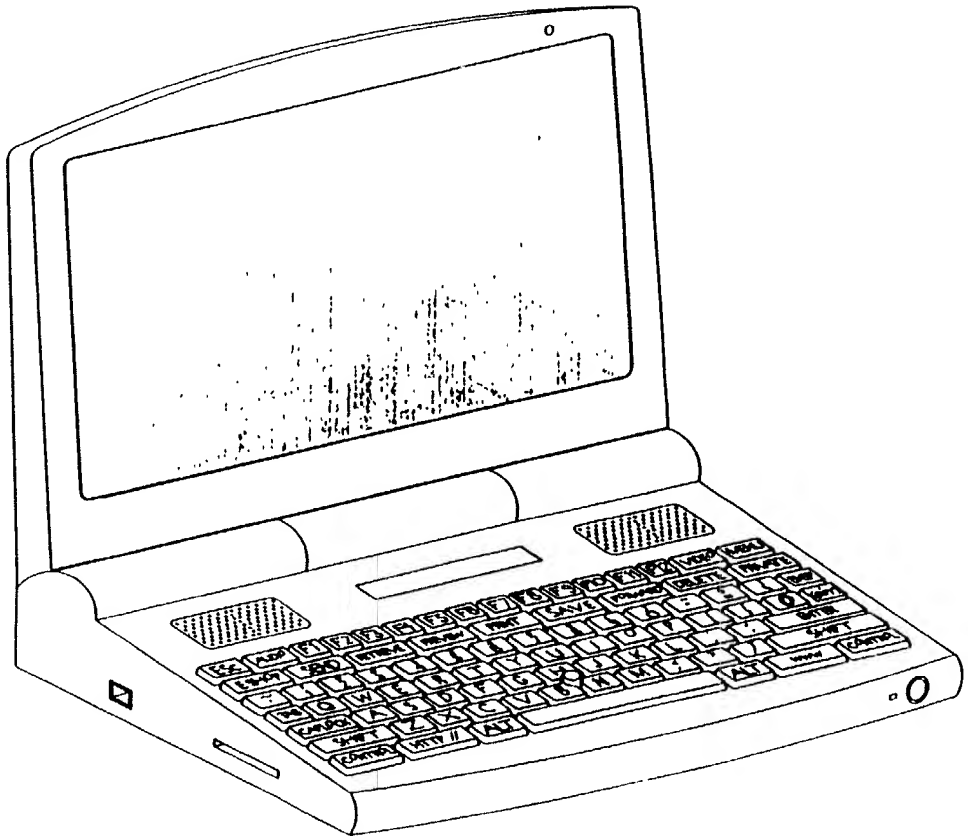


Figure 27

EXHIBIT 1042

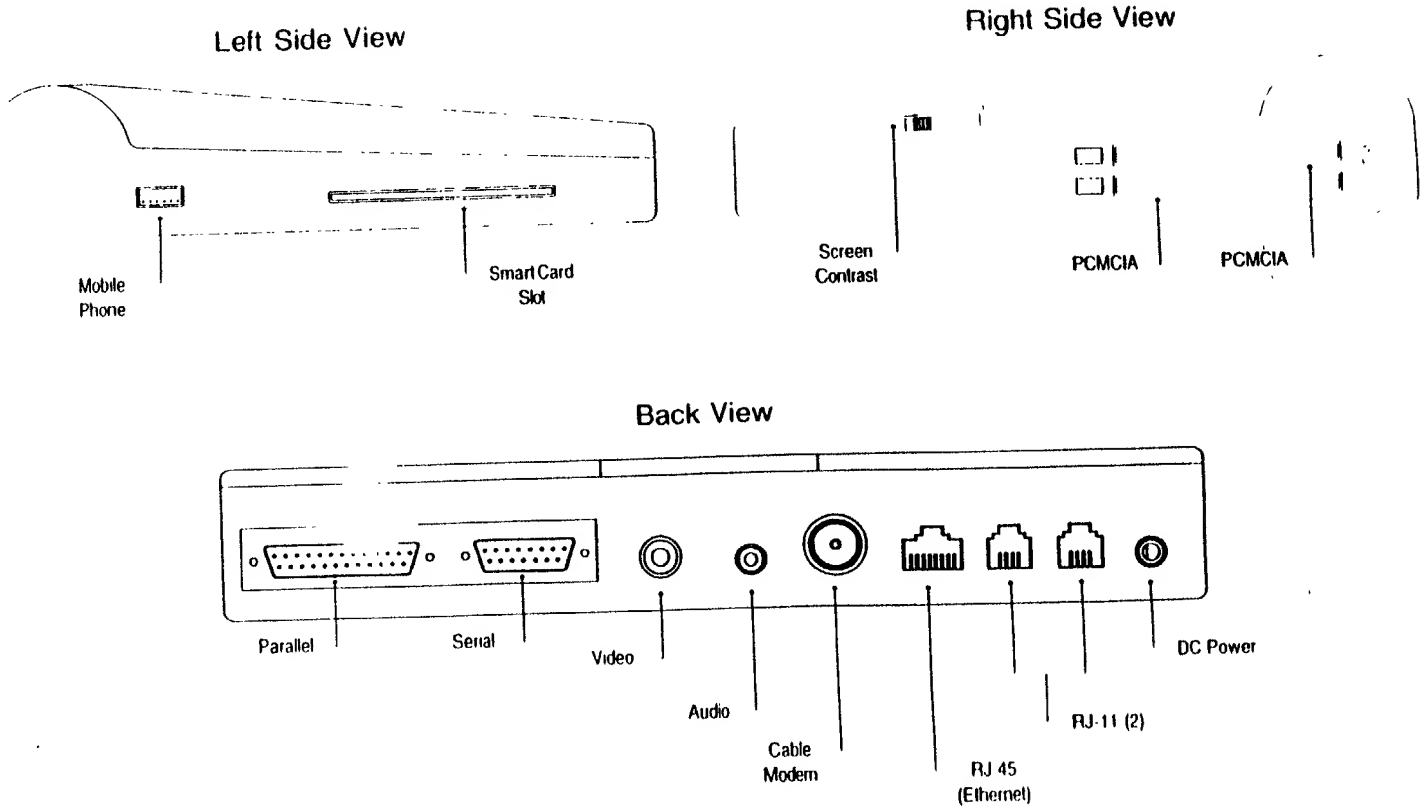


Figure 28

FOOTER" 0x2C7860

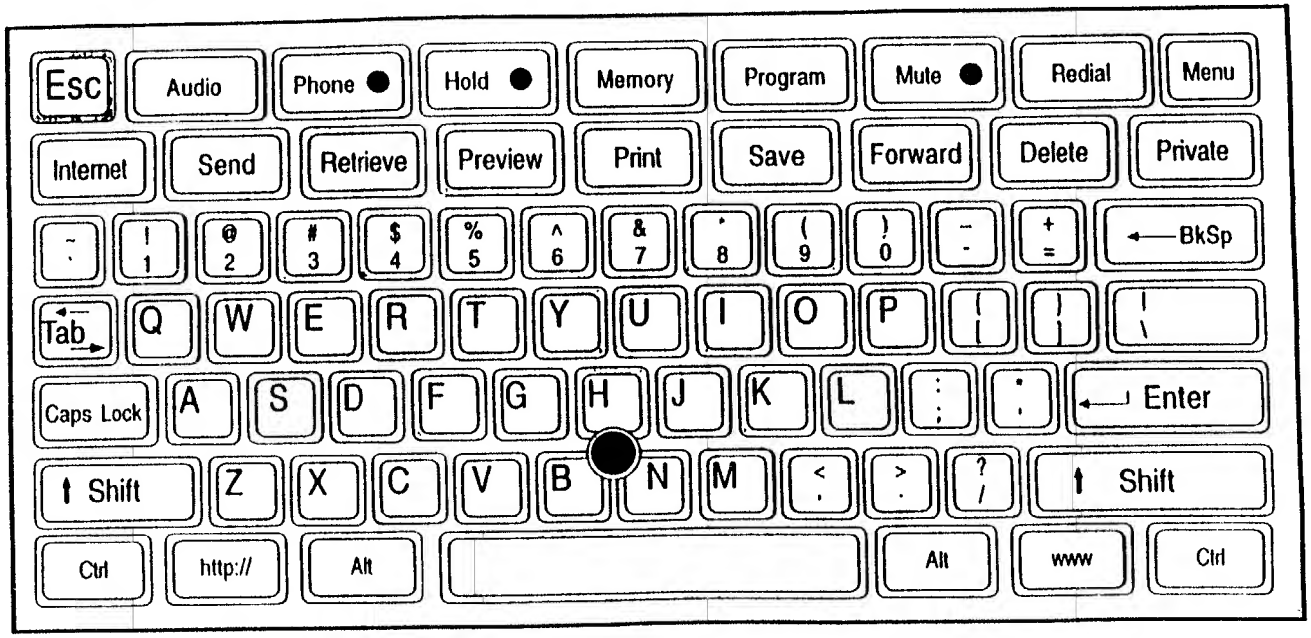


Figure 29

D00T2T "0402/3660

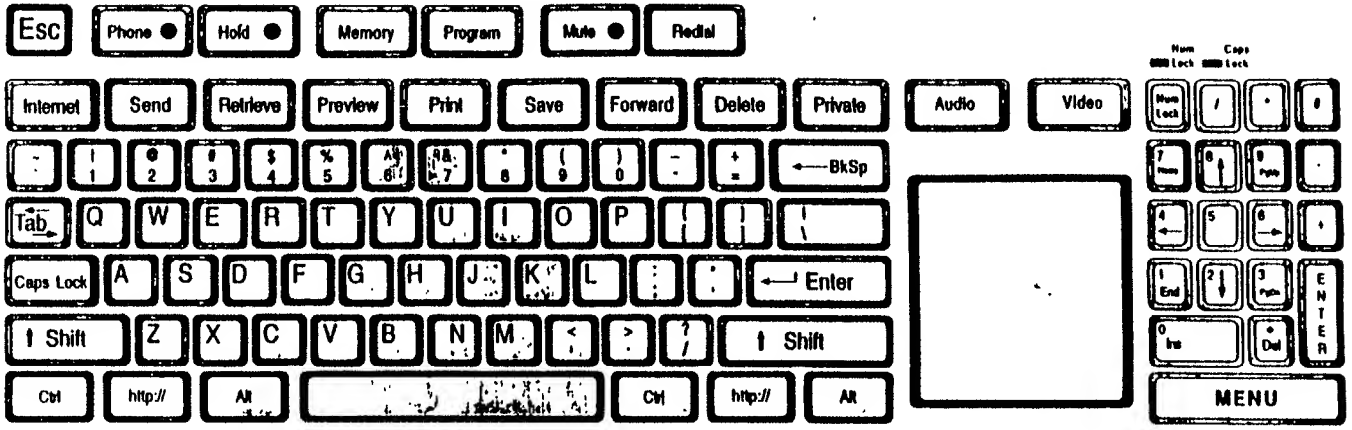


Figure 30

T00T2T" 0H2778E0

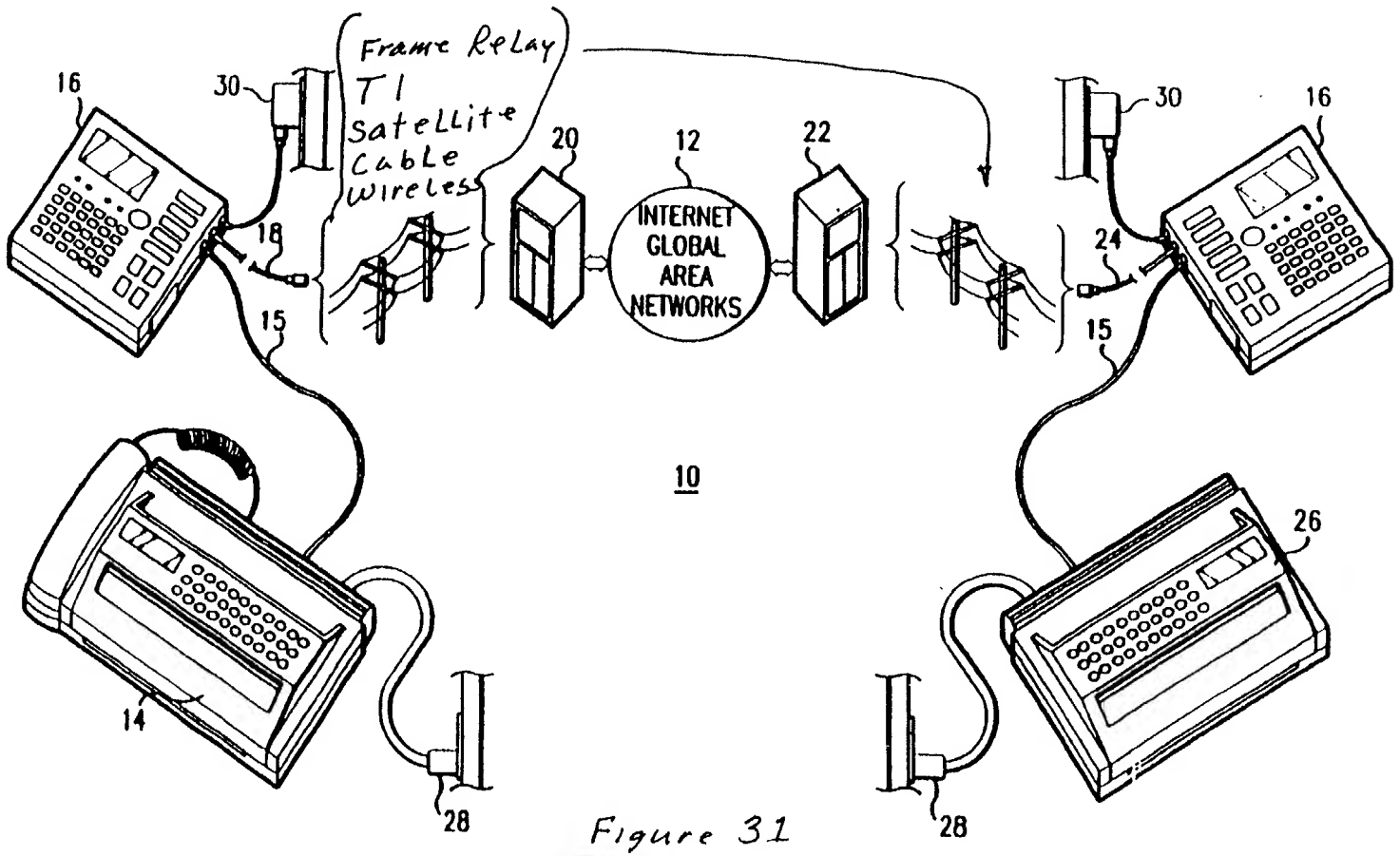


Figure 31

FOREST 0n2728b0

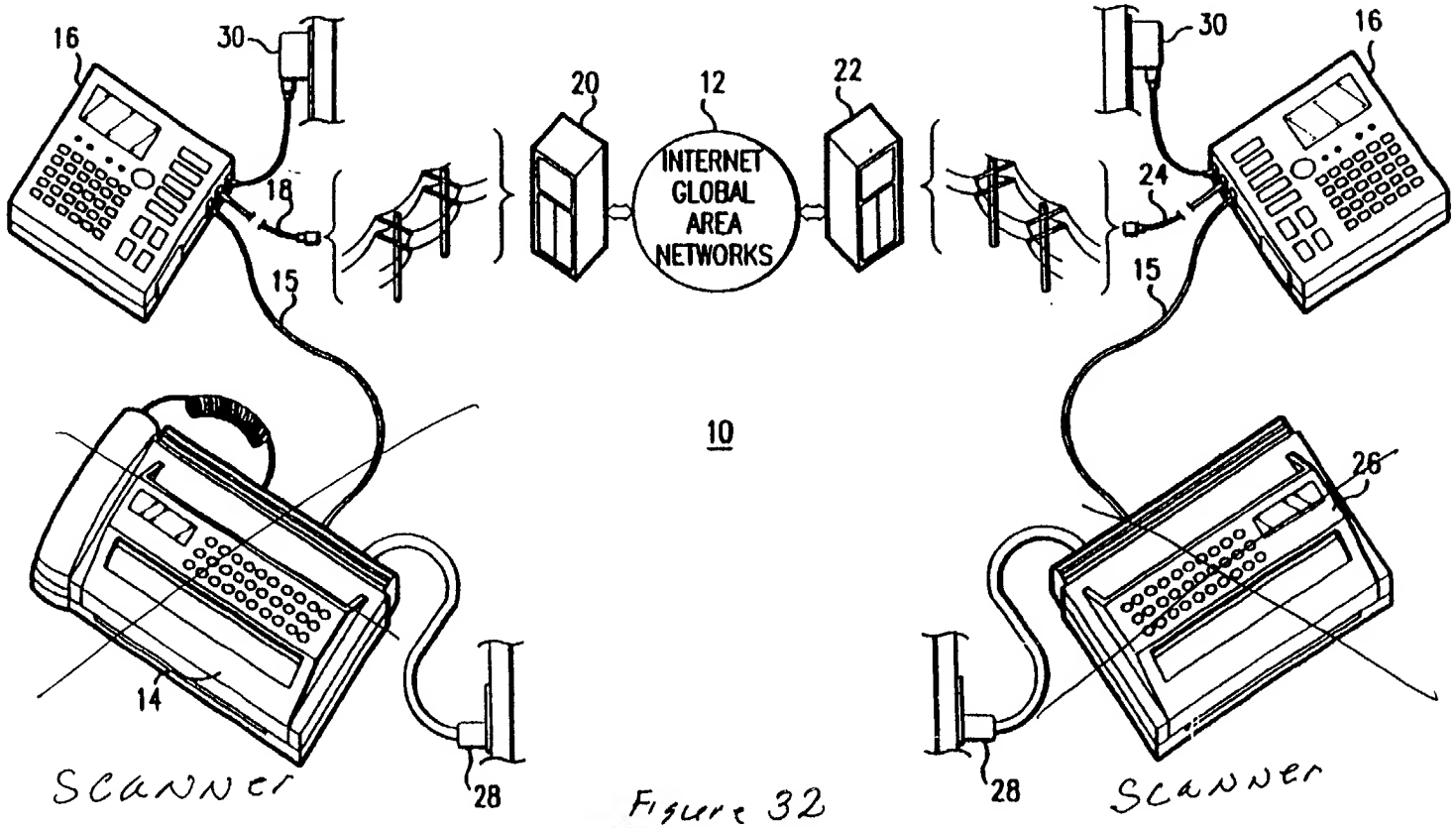


Figure 32

Docket 0n2428660

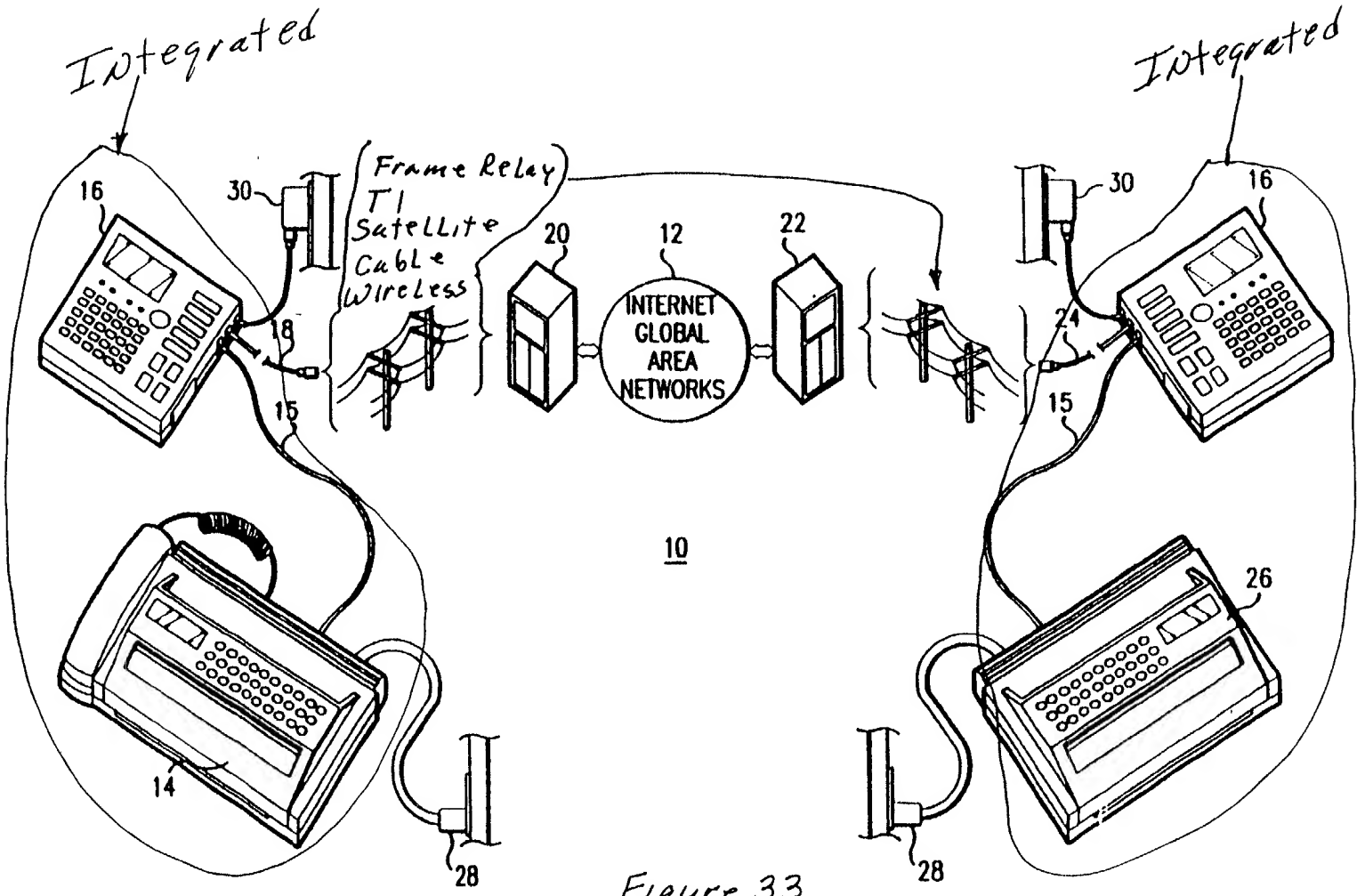


Figure 33

EDITED BY 08627860

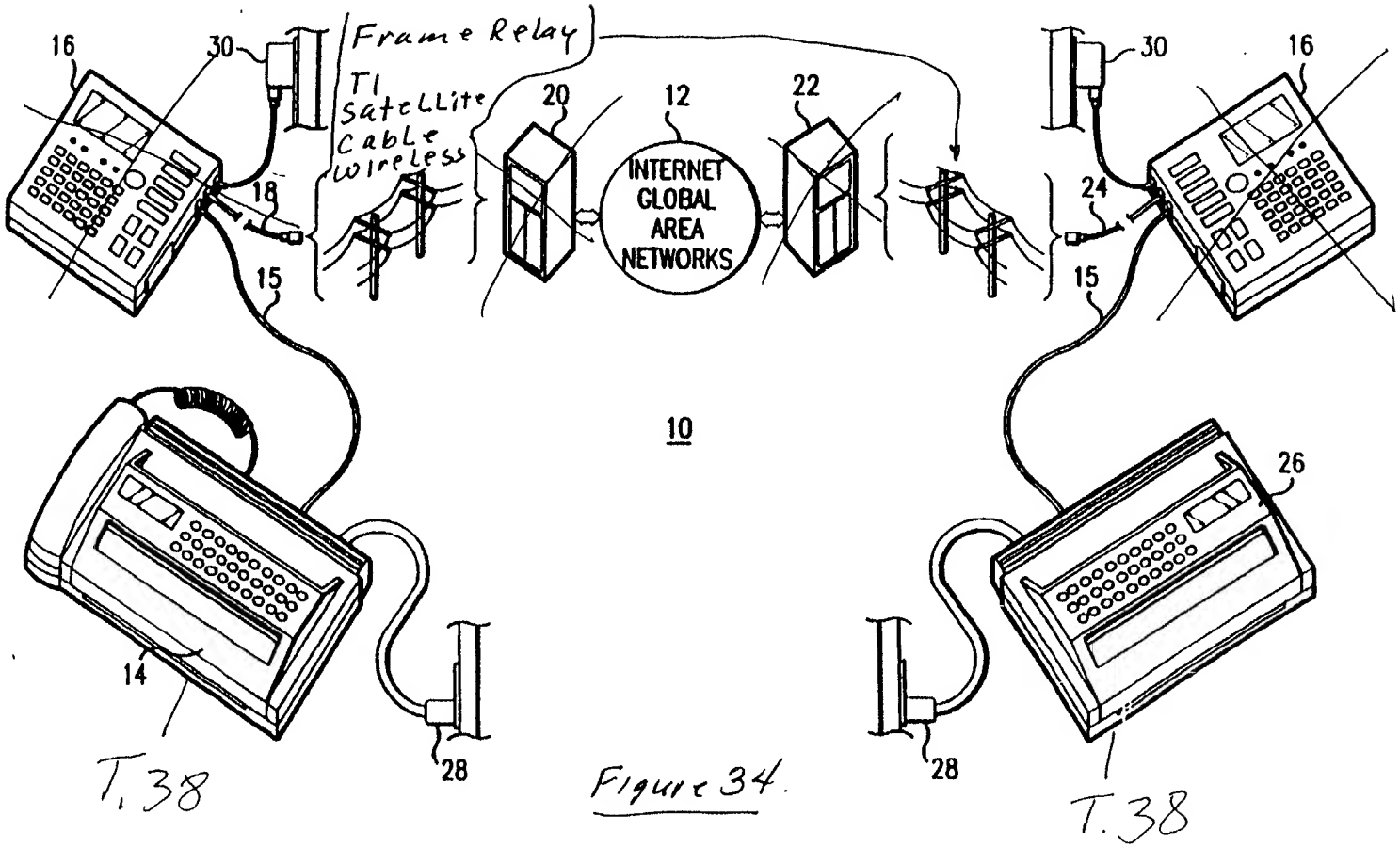
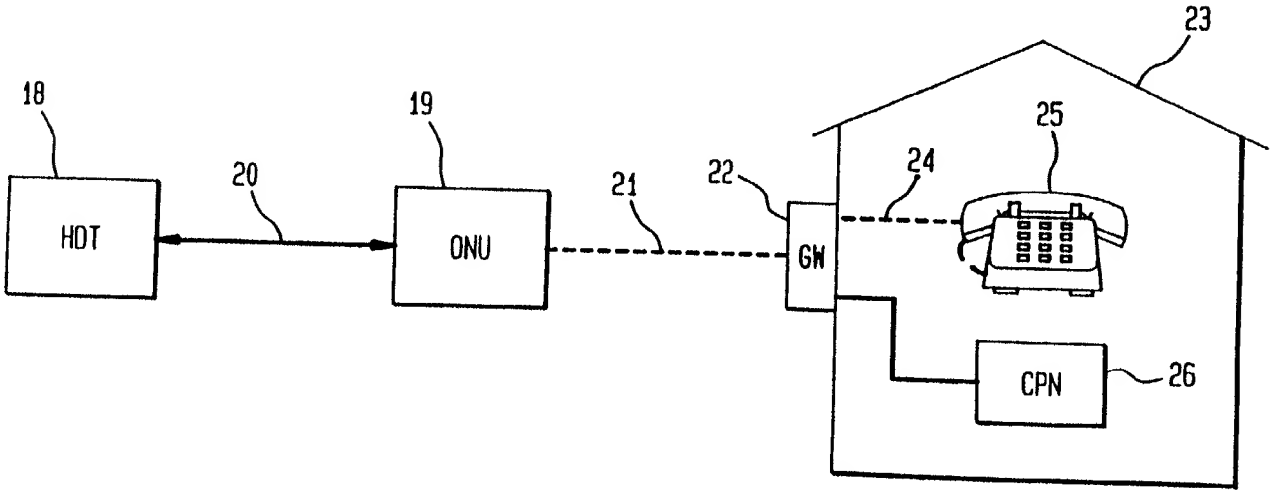


Figure 34.

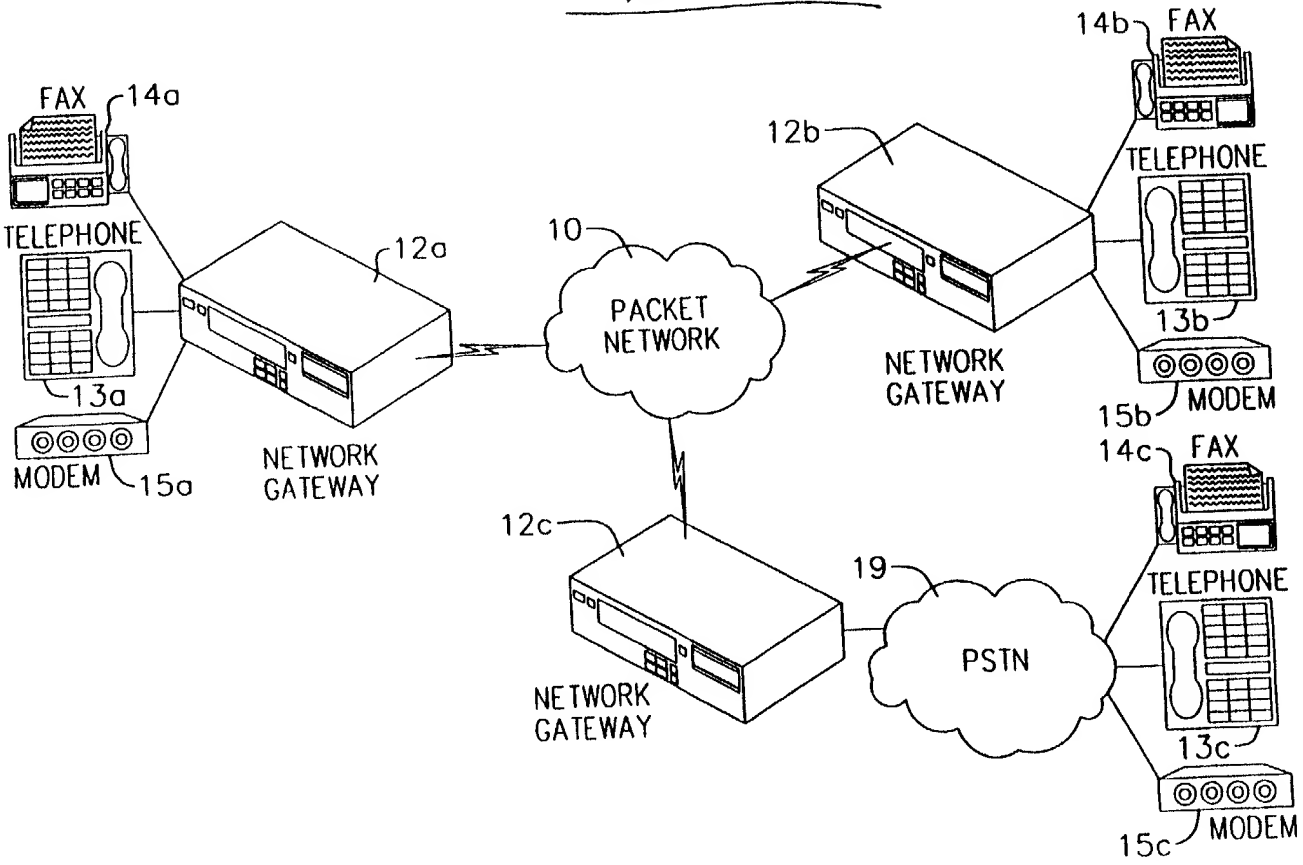
EP 0 762 678 A2

Figure 35



FOIET "0420860

Figure 36



TOOTZT "0W3727860

Figure 37

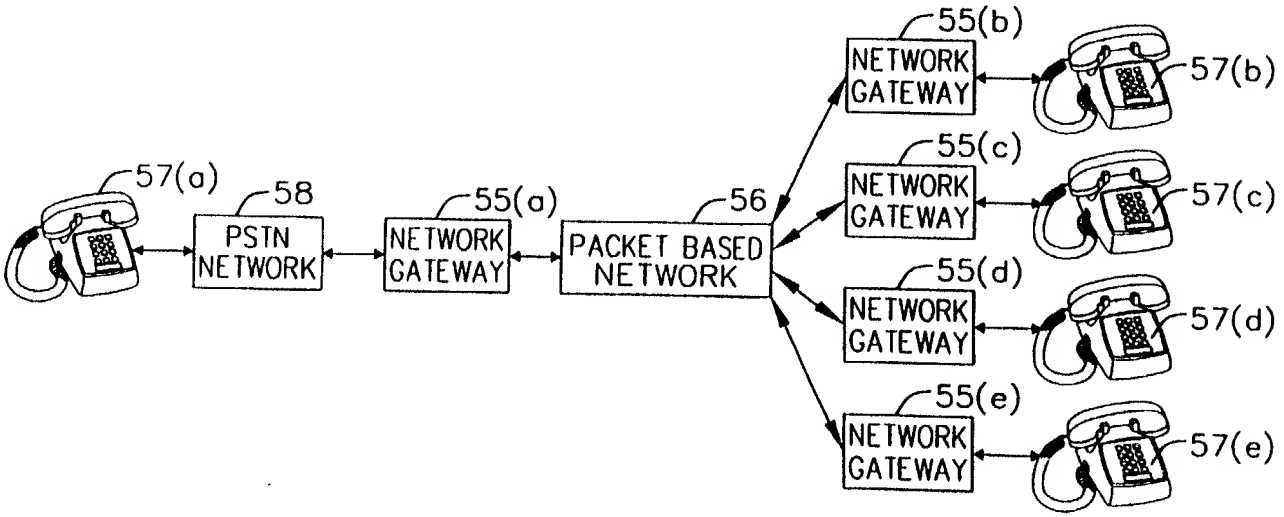
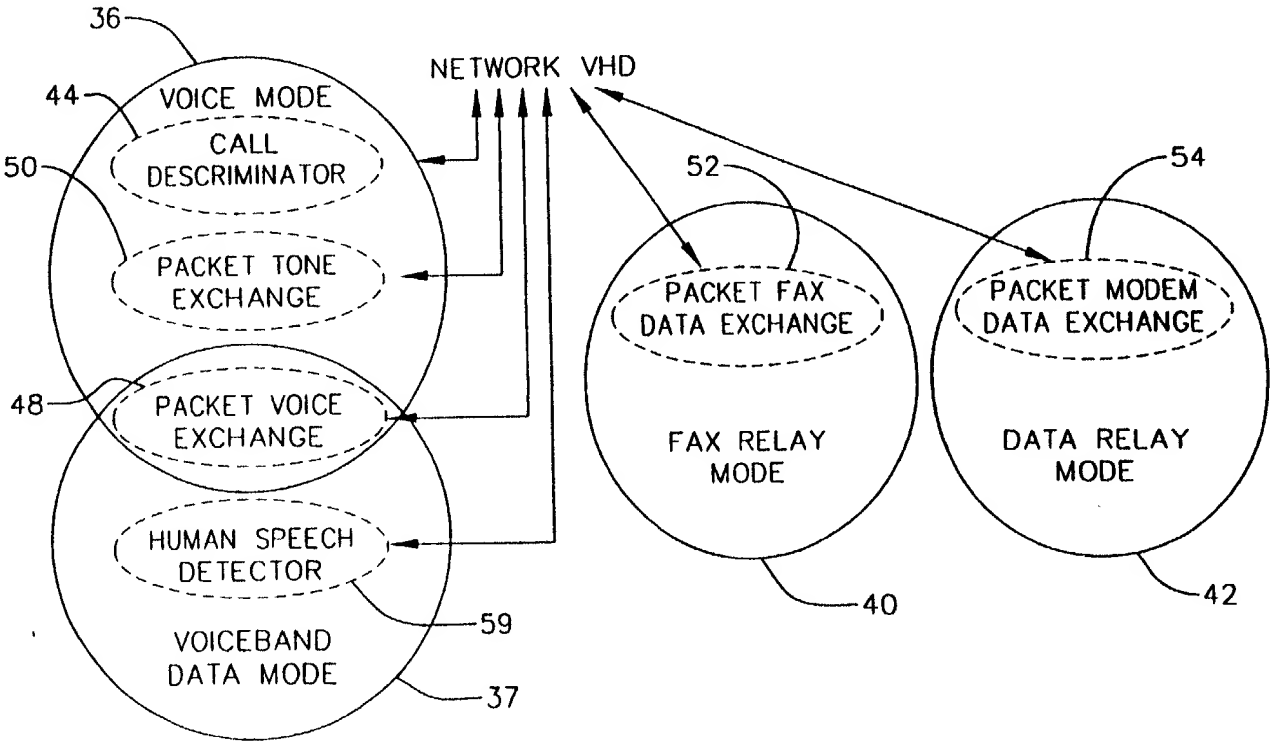


Figure 38


36
NETWORK VHD
44
VOICE MODE
CALL DESCRIMINATOR
50
PACKET TONE EXCHANGE
48
PACKET VOICE EXCHANGE
HUMAN SPEECH DETECTOR
59
VOICEBAND DATA MODE
37
52
PACKET FAX DATA EXCHANGE
FAX RELAY MODE
40
54
PACKET MODEM DATA EXCHANGE
DATA RELAY MODE
42

TOOTSE: 08227860

Figure 39

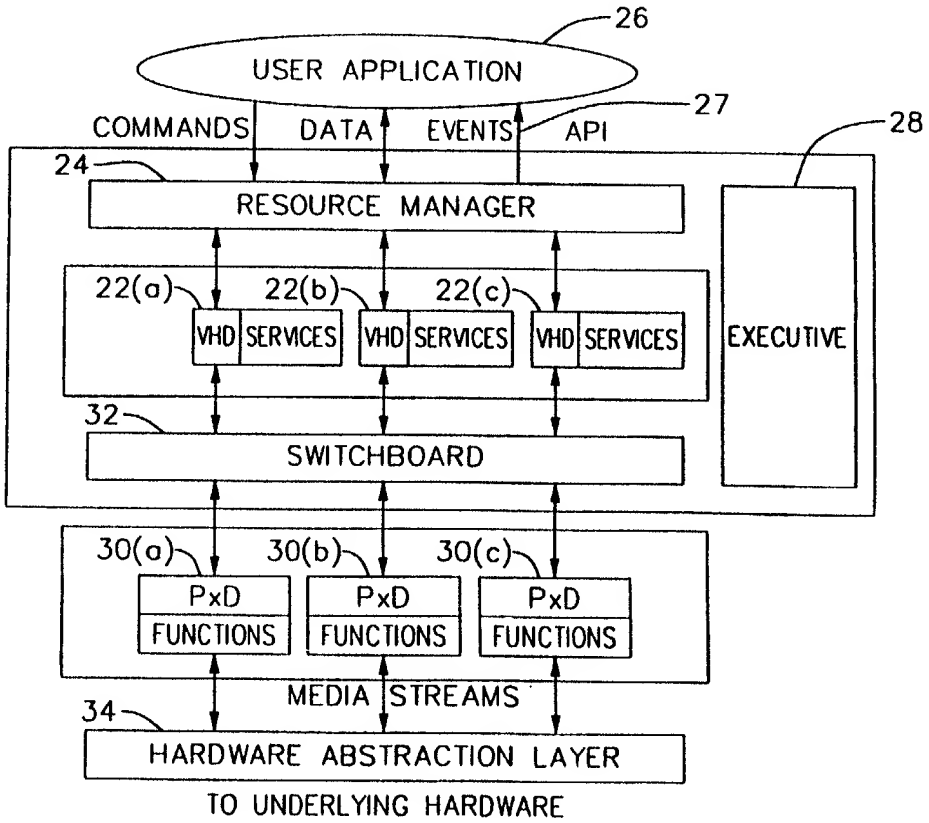
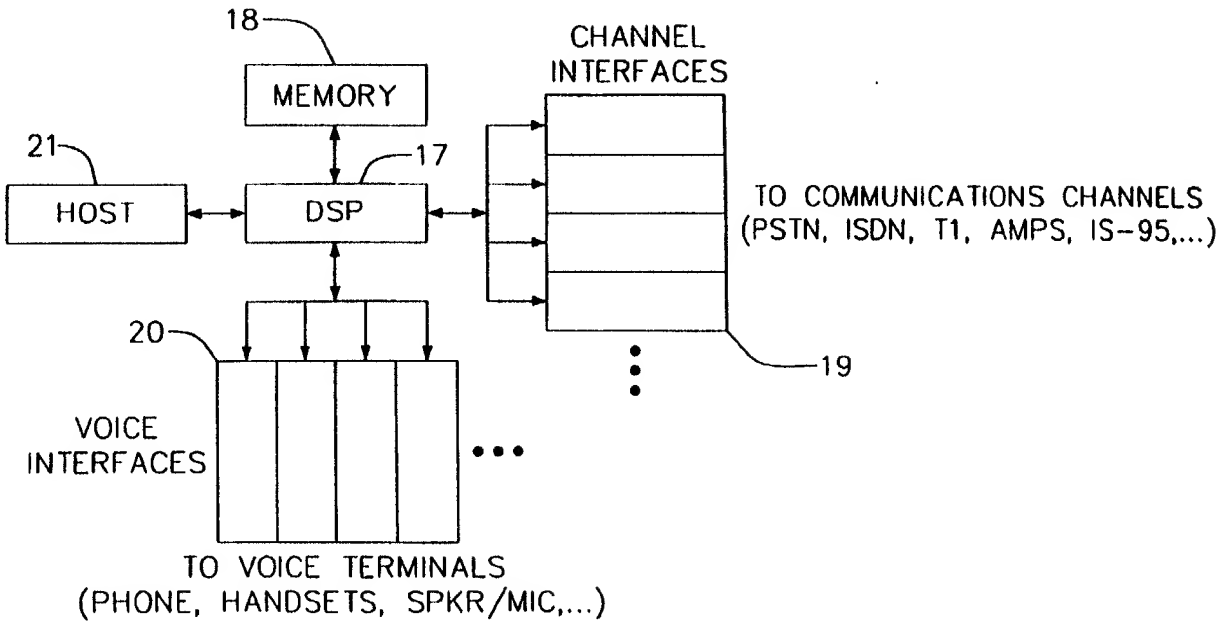
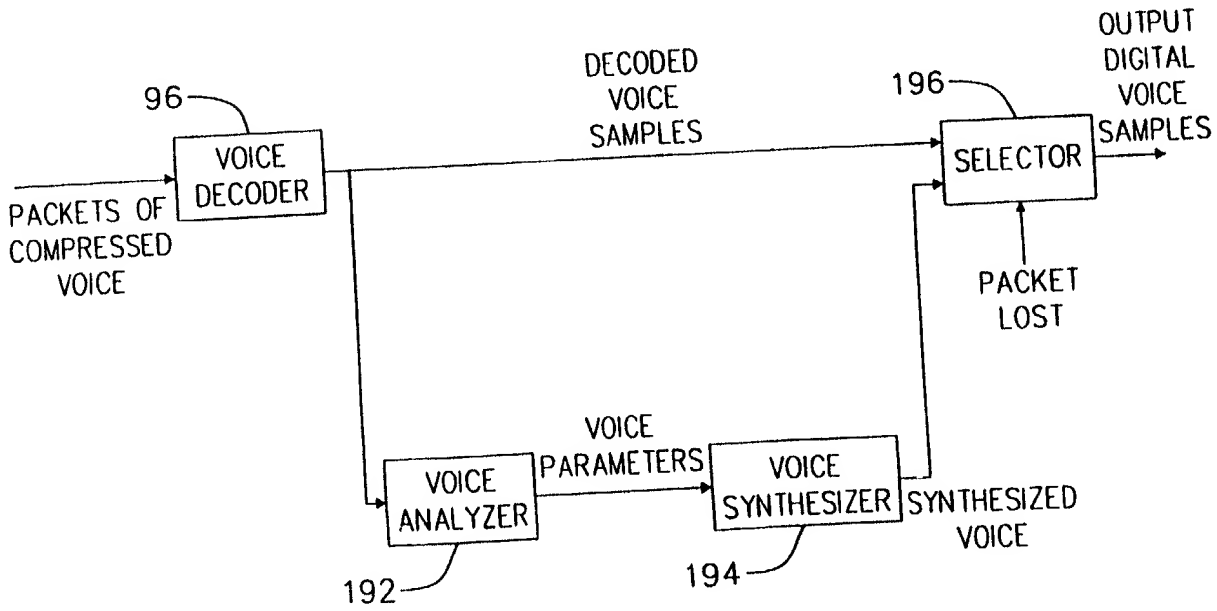


Figure 40


18
MEMORY
CHANNEL
INTERFACES
21
HOST
17
DSP
TO COMMUNICATIONS CHANNELS
(PSTN, ISDN, T1, AMPS, IS-95,...)
20
19
VOICE
INTERFACES
TO VOICE TERMINALS
(PHONE, HANDSETS, SPKR/MIC,...)

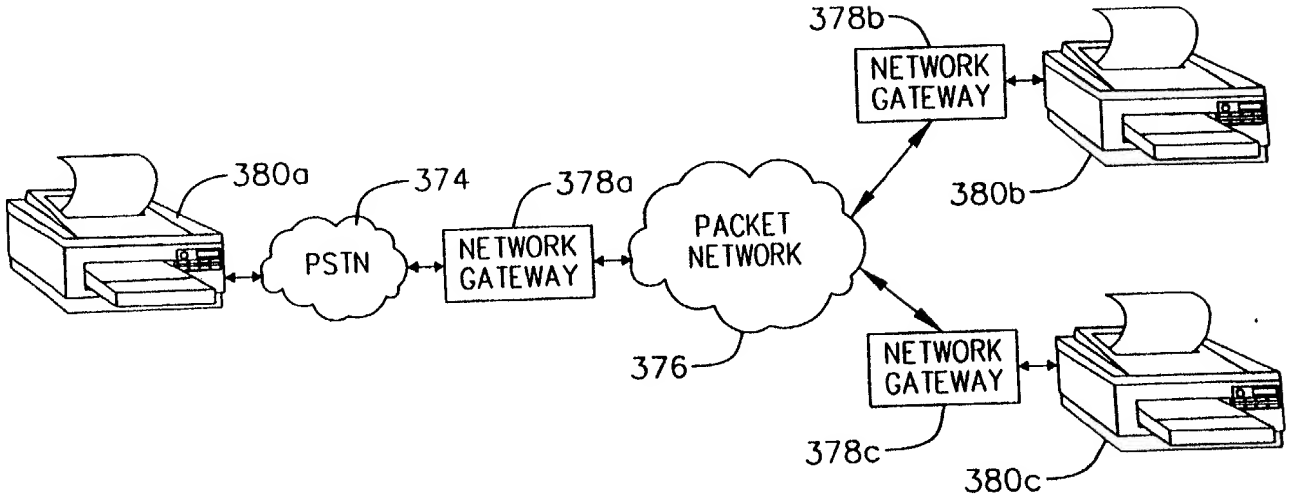
FOOTER 0962/2868

Figure 41



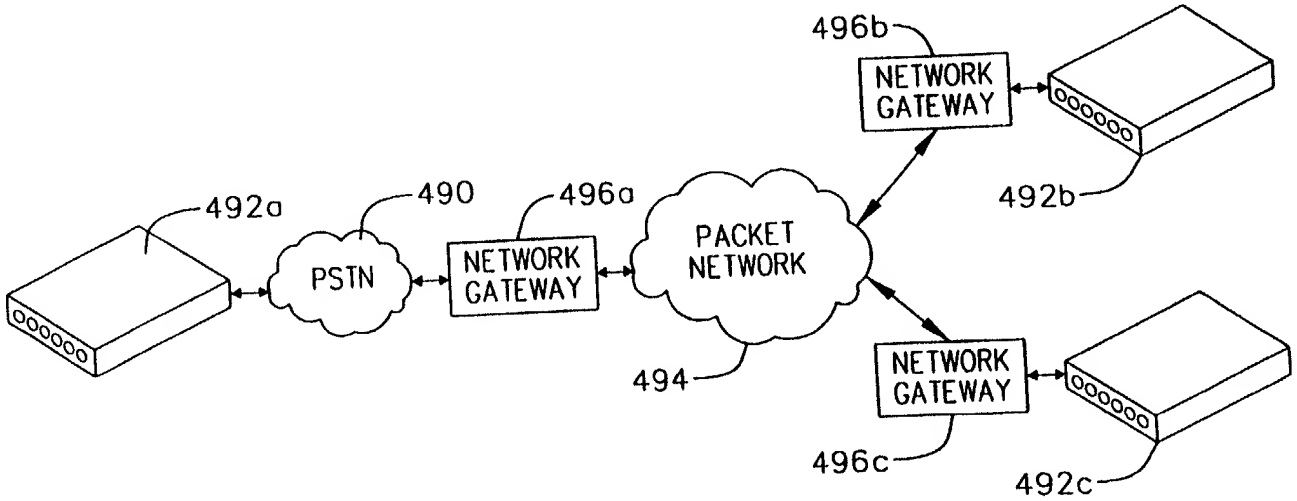
T00T3F" 0k2Z2860

Figure 42



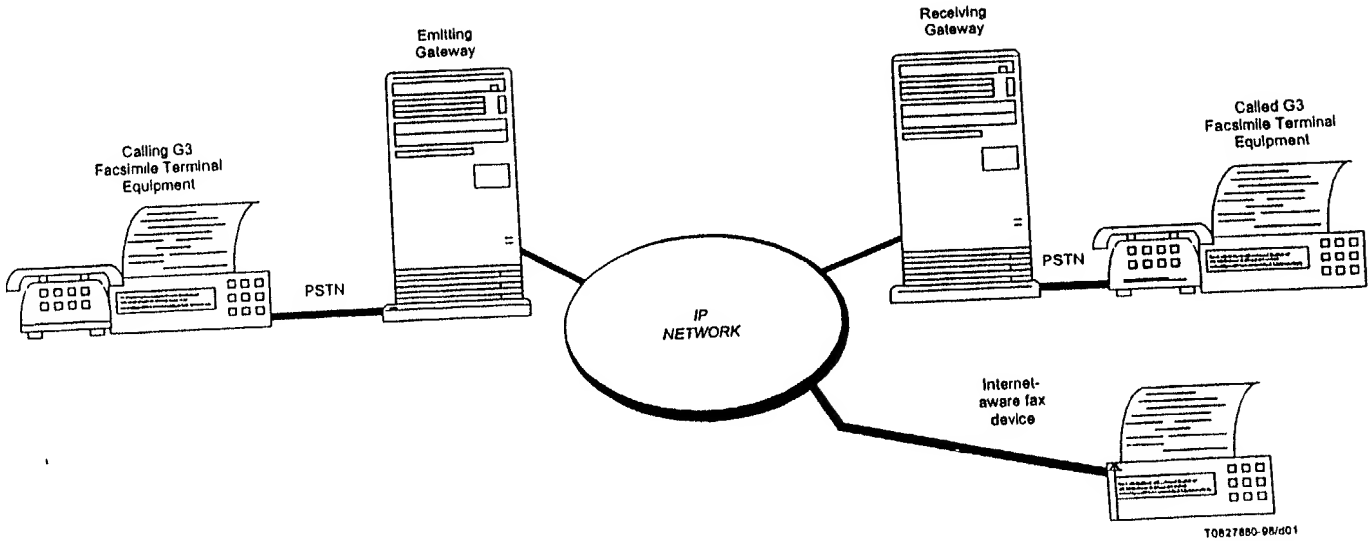
FOOTAT "0n24248G0

Figure 43



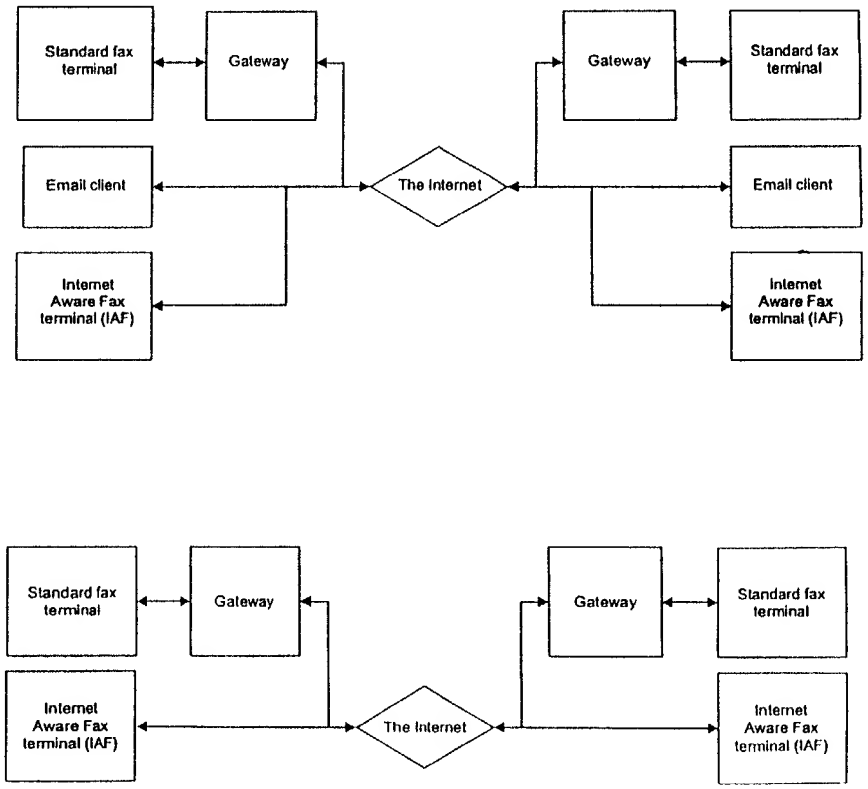
TARGET 0fa24860

Figure 44



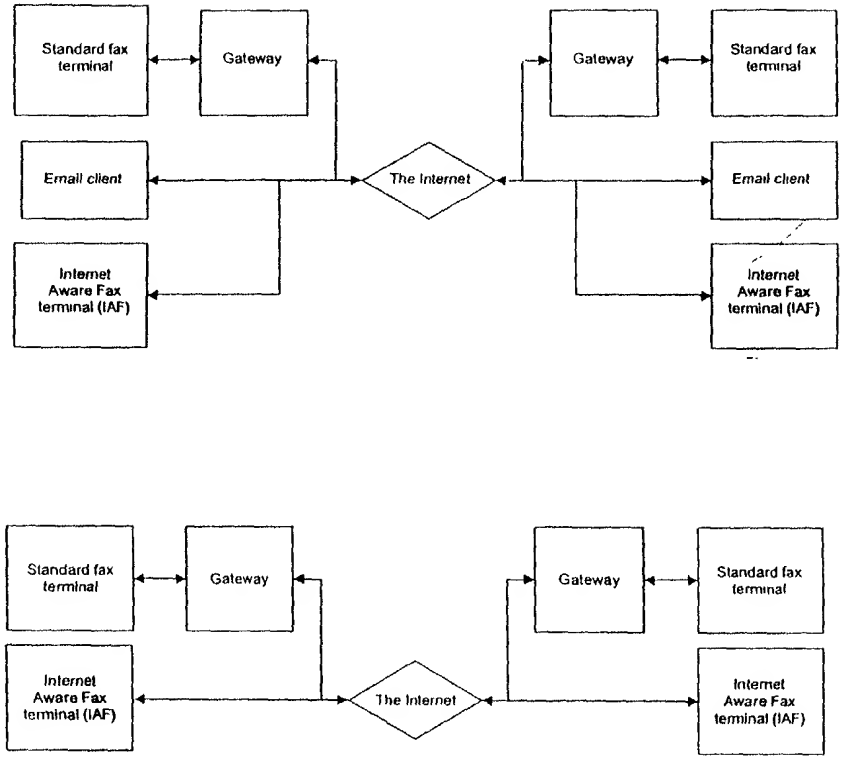
TARGET" dh2428660

Figure 45



EP0872960

Figure 46



T0827860 08/27/860

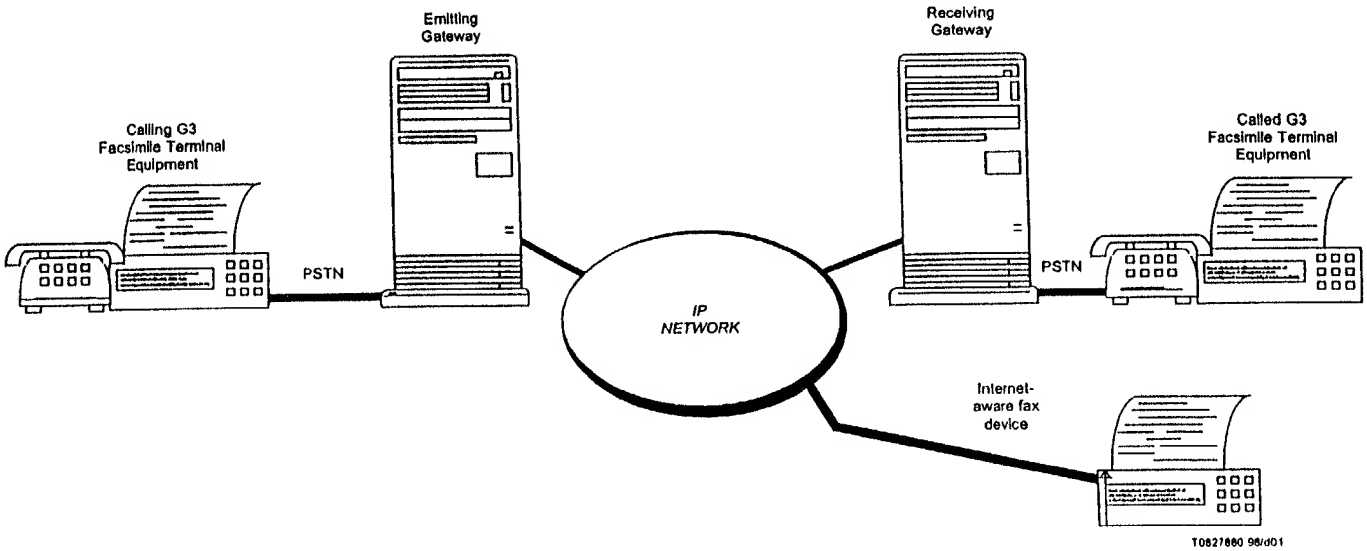



Figure 47